THE

Horticulturist,

AND

JOURNAL OF RURAL ART AND RURAL TASTE.

VOL. III. AUGUST, 1848. No. 2.

A FRESH BOUQUET OF MIDSUMMER ROSES stands upon the table before us. The morning dew-drops hang, heavy as emeralds, upon branch and buds; soft and rich colours delight the eye with their lovely hues, and that rose-odor, which, every one feels, has not lost anything of its divine sweetness since the first day the flower bloomed in that heaven-garden of Eve, fills the air. Yes, the flowers have it; and if we are not fairly forced to say something this month in behalf of roses, then was Dr. DARWIN mistaken in his theory of vegetable magnetism.

We believe it was that monster, the Duke of GUISE, who always made his escape at the sight of a rose. If there are any "outside barbarians" of this stamp among the readers of our "flowery land," let them glide out while the door is open. They deserve to be drowned in a butt of attar of rose—the insensibles! We can well afford to let them go, indeed; for we feel that we have only to mention the name of a rose, to draw more closely around us the thousands of the fairer and better part of our readers, with whom it is the type of everything fair and lovely on earth.

"Dear flower of heaven and love! thou glorious thing
That lookest out the garden nooks among;
Rose, that art ever fair and ever young;
Was it some angel on invisible wing
Hover'd around thy fragrant sleep, to fling
His glowing mantle of warm sunset hues
O'er thy unfolding petals, wet with dews,
Such as the flower-fays to Titania bring?
O flower of thousand memories and dreams,
That take the heart with faintness, while we gaze
On the rich depths of thy inwoven maze;
From the green banks of Eden's blessed streams
I dream'd thee brought, of brighter days to tell
Long pass'd, but promised yet with us to dwell."

If there is any proof necessary, that the rose has a diviner origin than all other flowers, it is easily found in the unvarying constancy of mankind to it for so many long centuries. Fashions there have been innumerable, in ornaments of all sorts, from simple sea-shells, worn by Nubian maidens, to costly diamonds, that heighten the charms of the proudest court beauty—silver, gold, precious stones—all have their season of favor, and then again sink into comparative neglect; but a simple rose has ever been and will ever be the favorite emblem and adornment of beauty.

"Whatsoe'er of beauty
Yearns, and yet reposes,
Blush, and bosom, and sweet breath,
Took a shape in roses." LEIGH HUNT.

Now the secret of this perpetual and undying charm about the rose, is not to be found in its colour — there are bright lilies, and gay tiger flowers, and dazzling air-

plants, far more rich and vivid; it is not alone in fragrance,—for there are violets and jasmines with "more passionate sighs of sweetness;" it is not in foliage, for there are laurels and magnolias, with leaves of richer and more glossy green. Where, then, does this secret of the world's six thousand years' homage, lie?

In its being a type of *infinity*. Of infinity! says our most innocent maiden reader, who loves roses without caring why, and who does *not* love infinity because she does not understand it. Roses, a type of infinity, says our theological reader, who has been in the habit of considering all flowers of the field, aye, and the garden, too, as emblems of the short-lived race of man,—"born to trouble as the sparks fly upward." Yes, we have said it, and for the honor of the rose we will prove it, that the secret of the world's devotion to the rose,—of her being the queen of flowers by acclamation always and forever, is that the rose is a type of infinity.

In the first place, then, the rose is a type of infinity, because there is no limit to the variety and beauty of the forms and colours which it assumes. From the *wild rose*, whose sweet, faint odor is wasted in the depths of the silent wood, or the Eglantine, whose wreaths of fresh sweet blossoms embroider even the dusty road sides,

"Starring each bush in lanes and glades,"

to that most perfect, full, rounded, and odorous flower, that swells the heart of the florist as he beholds its richness and symmetry, what an innumerable range of shades, and forms, and colours. And, indeed, with the hundreds and thousands of roses of modern times, we still know little of all the varied shapes which the plant has taken in by-gone days, and which have perished with the thousand other refinements and luxuries of the nations who cultivated and enjoyed them.*

All this variety of form, so far from destroying the admiration of mankind for the rose, actually increases it. This very character of infinity, in its beauty, makes it the symbol and interpreter of the affections of all ranks, classes, and conditions of men. The poet, amid all the perfections of the parterre, still prefers the scent of the woods and the air of freedom about the original blossom, and says—

"Far dearer to me is the wild flower that grows
Unseen by the brook where in shadow it flows."

The *cabbage-rose*, that perfect emblem of healthful rural life, is the pride of the cottager; the *daily China rose*, which cheats the window of the crowded city of its gloom, is the joy of the daughter of the humblest day laborer; the delicate and odorous *tea-rose*, fated to be admired and to languish in the drawing-room or the boudoir, wins its place in the affections of those of most cultivated and fastidious tastes; while the *moss rose* unites the admiration of all classes, coming in as it does with its last added charm, to complete the circle of perfection.

Again, there is the *infinity of associations* which float like rich incense about the rose, and that, after all, bind it most strongly to us; for they represent the ac-

* Many of our readers may not be aware to what perfection the culture of flowers was once carried in Rome. During Cæsar's reign, so abundant had forced flowers become in that city that when the Egyptians, intending to compliment him on his birth-day, sent him roses in midwinter, they found their present almost valueless from the profusion of roses in Rome. The following translation of *Martial's* Latin Ode to Cæsar upon this present, will give some idea of the state of floriculture then. There can scarcely be a doubt that there were hundreds of sorts of roses known to, and cultivated by the Romans, now entirely lost:

"The ambitious inhabitants of the land, watered by the Nile, have sent thee, O Cæsar, the roses of winter, as a present, valuable for its novelty. But the boatman of Memphis will laugh at the gardens of Pharaoh as soon as he has taken one step in thy capital city; for the spring, in all its charms, and the flowers in their fragrance and beauty, equal the glory of the fields of Pæstum. Wherever he wanders, or casts his eyes, every street is brilliant with garlands of roses. And thou, O Nile! must yield to the fogs of Rome. Send us thy harvests, and we will send thee roses."

cumulated wealth of joys and sorrows, which has become so inseparably connected with it in the human heart.

"What were life without a rose!"

seems to many, doubtless, to be a most extravagant apostrophe; yet, if this single flower were to be struck out of existence, what a chasm in the language of the heart would be found without it. What would the poets do? They would find their finest emblem of female loveliness stolen away. Listen, for instance, to old BEAUMONT and FLETCHER:—

——"Of all flowers,
Methinks a Rose is best;
It is the very emblem of a maid;
For when the west wind courts her gently,
How modestly she blows and paints the sun
With her chaste blushes! When the north wind comes
near her,
Rude and impatient, then, like chastity,
She locks her beauties in her bud again,
And leaves him to base briars"

What would the lovers do? What tender confessions, hitherto uttered by fair half-open buds and bouquets, more eloquent of passion than the *Nouvelle Heloise*, would have to be stammered forth in miserable clumsy *words!* How many doubtful suits would be lost — how many bashful hearts would never venture — how many rash and reckless adventurers would be shipwrecked, if the tender and expressive language of the rose were all suddenly lost and blotted out. What could we place in the hands of childhood to mirror back its innocent expression so truly? What blossoms could bloom on the breast of the youthful beauty so typical of the infinity of hope and sweet thoughts, that lie folded up in her own heart, as fair young rose buds? What wreath could so lovingly encircle the head of the fair young bride as that of white roses, full of purity and grace? And, last of all, what blossom, so expressive of human affections, could we find at the bier to take the place of the rose; the rose, sacred to this purpose for so many ages, and with so many nations,

——"because its breath
Is rich beyond the rest; and when it dies
It doth bequeath a charm to sweeten death."
BARRY CORNWALL.

The rose is not only infinite in its forms, hues, types, and associations, but *it deserves an infinite number of admirers.* This is the explanation of our desire to be eloquent in its behalf. There are, unfortunately, some persons who, however lovely, beautiful, or perfect a thing may be in itself, will never raise their eyes to look at it, or open their hearts to admire it, unless it is incessantly talked about.

We have always observed, however, that the great difficulty with those who like to talk about fruits and flowers is, when once talking, to stop. There is no doubt whatever, that we might go on, therefore, and fill this whole number with roses, rosariums, rosaries, and rose-water, but that some of our western readers, who are looking for us to give them a cure for the pear-blight, might cry out—"a blight on your roses!" We must, therefore, grow more systematic and considerate in our remarks.

We thought some years ago that we had seen that *ultima thule*—"a perfect rose." But we were mistaken! Old associates, familiar names, and long cherished sorts have their proper hold on our affections; but—we are bound to confess it — modern florists have coaxed and teased nature till she has given them roses more perfect in form, more airy, rich and brilliant in colour, and more delicate and exquisite in perfume, than any that our grandfathers knew or dreamed of. And, more than all, they have produced roses — in abundance, as large and fragrant as June roses — that blossom all the year round. If this unceasingly renewed perpetuity of charms does

not complete the claims of the rose to *infinity*, as far as any plant can express that quality, then are we no metaphysician.

There is certainly something instinctive and true in that favorite fancy of the poets — that roses are the type or symbol of female loveliness —

> "Know you not our only
> Rival flower — the human?
> Loveliest weight, on lightest foot —
> Joy-abundant woman,"

sings LEIGH HUNT for the roses. And, we will add, it is striking and curious that refined and careful culture has the same effect on the outward conformation of the rose that it has on feminine beauty. The *tea* and the *bourbon roses* may be taken as an illustration of this. They are the last and finest product of the most perfect culture of the garden; and do they not, in their graceful and airy forms, their subdued and bewitching odors, and their refined and delicate colours, body forth the most perfect symbol of the most refined and cultivated IMOGEN or OPHELIA that it is possible to conceive? We claim the entire merit of pointing this out, and leave it for some poet to make himself immortal by!

There are odd, crotchetty persons among horticulturists, who correspond to old bachelors in society, that are never satisfied to love anything in particular, because they have really no affections of their own to fix upon any object, and who are always, for instance, excusing their want of devotion to the rose, under the pretence, that among so many beautiful varieties it is impossible to choose.

Undoubtedly there is an *embarras de richesses* in the multitude of beautiful varieties that compose the groups and subdivisions of the rose family. So many lovely forms and colours are there, dazzling the eye, and attracting the senses, that it requires a man or woman of nerve as well as taste, to decide and select. Some of the great rose growers continually try to confuse the poor amateur by their long catalogues, and by their advertisements about "acres of roses." (Mr. PAUL, an English nurseryman, published, in June last, that he had 70,000 plants in bloom at once!) This is puzzling enough, even to one that has his eyes wide open, and the sorts in full blaze of beauty before them. What, then, must be the quandary in which the novice, not yet introduced into the aristocracy of roses, whose knowledge only goes up to a "cabbage-rose," or a "maiden's blush," and who has in his hand a long list of some great collector — what, we say, must be his perplexity, when he suddenly finds himself amidst all the renowned names of old and new world's history, all the aristocrats and republicans, heroes and heroines of past and present times,—Napoleon, Prince Esterhazy, Tippoo Saib, Semiramis, Duchess of Sutherland, Princesse Clementine, with occasionally such touches of sentiment from the French rose growers, as *Souvenir d'un Ami*, or *Nid d'Amour*, (nest of love!) &c. &c. In this whirlpool of rank, fashion, and sentiment, the poor novitiate rose-hunter is likely enough to be quite wrecked; and instead of looking out for a *perfect rose*, it is a thousand to one that he finds himself confused amid the names of princes, princesses and lovely duchesses, a vivid picture of whose charms rises to his imagination as he reads the brief words "pale flesh, wax-like, superb," or "large, perfect form, beautiful," or "pale blush, very pretty;" so that it is ten to one that Duchesses, not Roses, are all the while at the bottom of his imagination!

Now, the only way to help the rose novices out of this difficulty, is for all the initiated to confess their favorites. No doubt it will be a hard task for those who have

had butterfly fancies,—coquetting first with one family and then with another. But we trust these horticultural flirts are rare among the more experienced of our gardening readers,—persons of sense, who have laid aside such follies, as only becoming to youthful and inexperienced amateurs.

We have long ago invited our correspondents to send us their "confessions," which, if not as mysterious and fascinating as those of ROUSSEAU, would be found far more innocent and wholesome to our readers. Mr. BUIST, (whose new nursery grounds, near Philadelphia, have, we learn, been a paradise of roses this season,) has already sent us his list of favorites, which we made public in our last volume, (p. 434,) to the great satisfaction of many about to form little rose gardens. Dr. VALK, also, has indicated his preferences. And to encourage other devotees — more experienced than ourselves —we give our own list of favorites, as follows:

First of all roses, then, in our estimation, stand the BOURBONS, (the only branch of the family, not repudiated by republicans.) The most perpetual of all perpetuals, the most lovely in form, of all colours, and many of them of the richest fragrance; and, for us northerners, most of all, *hardy* and *easily cultivated*, we cannot but give them the first rank. Let us, then, say—

HALF A DOZEN BOURBON ROSES.

Souvenir de Malmaison, *pale flesh colour.*
Paul Joseph, *purplish crimson.*
Hermosa, *deep rose.*
Queen, *delicate fawn colour.*
Dupetit Thouars, *changeable carmine.*
Acidalie, *white.*

Souvenir de Malmaison (see FRONTISPIECE) is, take it all together,—its constant blooming habit, its large size, hardiness, beautiful form, exquisite colour, and charming fragrance, our favorite rose; the rose which, if we should be condemned to that hard penance of cultivating but one variety, our choice would immediately settle upon. Its beauty suggests a blending of the finest sculpture and the loveliest feminine complexion.

Second to the BOURBONS, we rank the REMONTANTES, as the French term them; a better name than the English one —*Perpetuals;* for they are by no means perpetual in their blooming habit, when compared with the Bourbons, China, or Tea roses. They are, in fact, June roses, that bloom two or three times in the season, whenever strong new shoots spring up; hence, no name so appropriate as *Remontante*,— sending up new flower shoots. We think this class of roses has been a little overrated by rose growers. Its great merit is the true, old-fashioned rose character of the blossoms,— large and fragrant as a damask or provence rose. But in this climate, *Remontantes* cannot be depended on for a constant supply of flowers, like Bourbon roses. Here are our favorite:

HALF A DOZEN REMONTANTES.

La Reine, *deep rose, very large.*
Duchess of Sutherland, *pale rose.*
Crimson Perpetual, *light crimson.*
Aubernon, *brilliant crimson.*
Lady Alice Peel, *fine deep pink.*
Madame Dameme, *dark crimson.*

Next to these come the CHINA ROSES, less fragrant, but *everlastingly* in bloom, and with very bright and rich colours.

HALF A DOZEN CHINA ROSES.

Mrs. Bosanquet, *exquisite pale flesh colour.*
Madame Breon, *rose.*
Eugene Beauharnais, *bright crimson.*
Clara Sylvain, *pure white.*
Cramoisie Superieure, *brilliant crimson.*
Virginale, *blush.*

The TEA ROSES, most refined of all roses, unluckily, require considerable shelter and

care in winter, in this climate; but they so richly repay all, that no rose-lover can grudge them this trouble. Tea roses are, indeed, to the common garden varieties what the finest porcelain is to vulgar crockery ware.

HALF A DOZEN TEA ROSES.

Safrano, *the buds rich deep fawn.*
Souvenir d'un Ami, *salmon, shaded with rose.*
Goubault, *bright rose, large and fragrant.*
Devoniensis, *creamy white.*
Bougere, *glossy bronze.*
Josephine Malton, *beautiful shaded white.*

We thought to give NOISETTES the go-by; but the saucy, rampant little beauties climb up and thrust their clusters of bright blossoms into our face, and will be heard. So here they are:

HALF A DOZEN NOISETTES.

Solfaterre, *bright sulphur, large.*
Jaune Desprez, *large bright fawn.*
Cloth of Gold, *pure yellow, fine.*
Aimee Vibert, *pure white, very free bloomer.*
Fellenberg, *brilliant crimson.*
Joan of Arc, *pure white.*

"Girdle of Venus! does he call this a select list?" exclaims some leveller, who expected us to compress all rose perfections into half a dozen sorts; when here we find, on looking back, that we have *thirty*, and even then, there is not a single moss rose, climbing rose, provence rose, damask rose, to say nothing of "musk roses," "microphylla roses," and half a dozen other divisions that we boldly shut our eyes upon! Well, if the truth must come out, we confess it boldly, that we are worshippers of the EVERBLOOMING roses. Compared with them, beautiful as all other roses may be and are, (we can't deny it,) they have little chance of favor with those that we have named, which are a perpetual garland of sweetness. It is the difference between a smile once a year, and a golden temper, always sweetness and sunshine. Why, the everblooming roses make a garden of themselves! Not a day without rich colours, delicious perfume, luxuriant foliage. No, take the lists as they are — too small by half; for we cannot cut a name out of them.

And yet, there are a few other roses that *ought to be* in the smallest collection. That finest of all rose-gems, the *Old Red Moss*, still at the head of all moss roses, and its curious cousin, the *Crested Moss*, must have their place. Those fine hardy climbers, that in northern gardens will grow in any exposure, and cover the highest walls or trellises with garlands of beauty,— the *Queen of the Prairies* and *Baltimore Belle*, (or, for southern gardens, say— *Laure Davoust*, and *Greville*, and *Ruga Ayrshire*;) that finest and richest of all yellow roses, the double *Persian Yellow*, and half a dozen of the gems among the hybrid roses, such as *Chénédole, George the 4th, Village Maid, Great Western, Fulgens, Blanchefleur;* we should try, at least, to make room for these also.

If we were to have but three roses, for our own personal gratification, they would be —

Souvenir de Malmaison,
Old Red Moss,
Gen. Dubourg.

The latter is a Bourbon rose, which, because it is an old variety, and not very double, has gone out of fashion. We, however, shall cultivate it as long as we enjoy the blessing of olfactory nerves; for it gives us, all the season, an abundance of flowers, with the most perfect rose scent that we have ever yet found; in fact, the true *attar of Rose.*

There are few secrets in the cultivation of the rose in this climate. First of all, make the soil *deep;* and, if the subsoil is not quite dry, let it be well drained. Then

remember that what the rose delights to grow in is *loam* and *rotten manure*. Enrich your soil, therefore, every year with well-decomposed stable manure; and if it is too sandy, mix fresh loam from an old pasture field; if it is too clayey, mix river or pit sand with it. The most perfect *specific stimulus* that we have ever tried in the culture of the rose, is what Mr. RIVERS calls *roasted turf*, which is easily made by paring sods from the lane sides, and half charring them. It acts like magic upon the little spongioles of the rose; making new buds and fine fresh foliage start out very speedily, and then a succession of superb and richly coloured flowers. We commend it, especially, to all those who cultivate roses in old gardens, where the soil is more or less worn out.

And now, like the Persians, with the hope that our fair readers "may sleep upon roses, and the dew that falls may turn into rose water," we must end this rather prolix chapter upon roses.

THE WISTARIA SINENSIS.

BY DR. W. W. VALK, FLUSHING.

IN several of the back numbers of the Horticulturist, quite a number of hardy plants and shrubs have been referred to as worthy cultivation, both for their vigor of growth and great beauty when in flower. Among the many which might be named as eminently deserving a somewhat extended notice, we ask the reader's attention to the *Wistaria sinensis*, or *Chinese Glycine*, as it is called by some persons. It is really one of the handsomest things of the kind that we know of, and we wish to make others of the same opinion, by saying something very favorable with regard to it. Amateurs will not find that we have misled them by speaking of the Wistaria as it deserves.

The most magnificent specimen that we ever saw, is trained upon one of the walls in the Garden of the *London Horticultural Society*, and occupies a space in length of 375 feet. Seen in full flower it was exquisitely beautiful, and few could look at it without wishing to have in their possession an ornament so exceedingly graceful. Next to this very extraordinary specimen, the prettiest we have seen in this country is at THORBURN'S *Astoria Garden;* and a third, of very considerable size, is in the nursery of Messrs. WINTER & Co., of this village.

Judging from the comparative infrequency of its occurrence in small gardens, it would appear not to be known that it is increased so readily as to be purchasable in most nurseries for a small sum, that it is *perfectly hardy*, and that it may be cultivated with the greatest ease, as well as in a considerable variety of ways. In stating these plain facts, therefore, and referring to the plant itself as an evidence of its desirableness, we shall just glance at the several modes in which it may be advantageously treated.

As a green-house or conservatory climber, its attractions are sufficiently familiar and recognized, although, considering its extreme beauty and fragrance, and capacity of blooming several times in a season, besides flourishing in almost any aspect, and being by no means particular as to where it is planted, we should expect to find

it in every green-house and conservatory throughout the country.

In the character of a tall shrub, however, or of a pole plant, for placing in the beds or borders of conservatories, or as a covering to any of the pillars which support the roof, or even pruned into a state of dwarfness, and kept in a pot, or made to trail on rustic work in the centre or back of a green-house, it is almost entirely unknown. To adapt it for any of these forms or positions, scarce any treatment is required beyond a due attention to pruning. But it is absolutely necessary that this pruning be rigid, and followed up with the greatest strictness.

The natural habit of the plant being to produce very long and comparatively weak shoots, it of course commences to form these from the very earliest period of its growth. Indeed, as soon as a layered branch has become a plant, by throwing out roots from that part which is plunged in the ground, and which has been partially cut through to facilitate the process, it will begin to develop those tenuous branches which are peculiar to the species; and, where a bushy specimen is required, the pruning must then be immediately started. Nor will it be at all prudent to cease this close pruning until the plant has been reared into the desired form, when it will also have acquired that tendency to bear short blooming spurs, instead of stout branches, which will render the subsequent prunings light and trifling.

By this kind of routine, therefore,—taking care to keep the shoots cut back very closely at least every year, and, in the first stages, twice or thrice each season,—good shrubby or pillar plants may readily be obtained for the conservatory. Nor is it to be questioned, that both the novelty and beauty of such objects would greatly contribute to the adornment of appropriate plant structures.

But, independently of the suitableness of this *Wistaria* for attaching to the pillars of a conservatory, and for being so confined by pruning as to cover them alone, without extending over any other portion of the building, it possesses an equally striking adaptation for affixing to poles, whether of wood or iron.

And here we cannot but digress a little to express our wonder, that in addition to those fine climbers which are in well kept establishments made to depend so naturally from the roof of the house, instead of being retained in that trim restricted form which was once so universal, the interesting open-ground practice of training climbers to poles is not more freely introduced. A pillar of exotic climbing roses, for example, supported by a pole, and standing out amidst the varied shrubs or arboreous plants of the conservatory, would be a most delightful object; and there is scarcely a climber of any description that might not be similarly managed; for, when once they have been brought, by pruning, into a duly compact form, with a tendency to produce *early lateral shoots*, these last will, if left almost untouched, soon fling themselves out around the stem in every direction, and gradually take that drooping and waving character which makes them so exceedingly graceful.

The *Wistaria* is an excellent plant for this purpose, as experience has fully proved. By efficient pruning, it will acquire, when at the height of ten or twelve feet, such a number of lateral branches about a foot long, that, after it has reached this state, it will bear only blooming spurs; or, if it should happen to throw out a few of its long slender shoots, these will only serve to increase its beauty during the summer, and be pruned away in winter.

Treated as a dwarf shrub, and cultivated in a pot, it is, moreover, an extremely manageable plant, and makes a very agreeable thing for a show house, as well for its actual interest, as because the fragrance of its flowers can be better enjoyed. What may be done with it in this way, is yet to most cultivators all speculation; but specimens have been exhibited which show that the most satisfactory results have followed the effort. As in the cases before spoken of, pruning is the means by which it is to be brought into this dwarf condition; and since it grows in the most common soil, the compost supplied to it in a pot should be of the simplest nature, such as ordinary garden earth, while the pot itself need not be over large.

In alluding to the *Wistaria* as a pot plant, we would not forget its capabilities *for forcing*, under such circumstances. Under the stimulus of a little heat it develops itself finely, as most cultivators well know. And when its attractions are duly considered, it will, we think, ere long be frequently subjected to the treatment indicated. As a plant for forcing, under any circumstances, this species is likely to prove a valuable accession to the rather limited number of such plants, and we shall be pleased if this hint should bring it more into notice. Its recommendations are freedom in the production of flowers, great beauty, and an exquisite fragrance.

When grown out of doors as a wall-plant, and trained over the face of a house or other edifice, the circumstance of its blooming before the leaves appear, though not in itself an interesting one, is a thing which might properly exercise the attention and inquiry of the culturist, in order to associate it with some other plant which would supply the lacking verdure. Perhaps the *ivy*, being the most verdant of all plants with a climbing habitude, might be very appropriately blended with the *Wistaria* in clothing a wall, or a portion of a building. From the spreading nature of the ivy, it would necessarily require a great deal of trimming and pruning, to prevent it from overrunning the *Wistaria* and smothering it. But this could be easily prevented, and if only half a dozen branches of bloom were here and there visible amidst the dark and glossy foliage of the ivy, the effect would be most charming.

But the *Cytisus laburnum* is more appropriate than the ivy for the purpose indicated above. It blooms nearly at the same time, has an allied character, and possessing a greater profusion of fine foliage, might be happily mingled with the *Wistaria*. There is no difficulty in training the Laburnum against a wall; and by intermingling the branches of the two plants, their similar racemes of blue and yellow blossoms would create a peculiar and pleasing effect.

In treating the *Wistaria* as an open ground plant, it has hitherto been chiefly employed for walls or against houses; and its singular adaptation for decorating bowers, arbors, &c., seems to have been quite overlooked. It is exceedingly well fitted for covering those trellised arches of wood or iron which are sometimes placed over the walks in flower gardens and pleasure grounds, as nothing could be more delightful than a walk beneath its lovely blooms. Those open roofed pavilions or canopies, too, which are occasionally made of rustic wood and put up in similar places, afford an equally good position for the charming *Wistaria*.

What so appropriate in the way of a climber for arbors, or the retired erections for rest and cool enjoyment, so common in some gardens, as the *Wistaria*? To look

through its noble racemes of blossoms, fringing the edge of the roof, or surrounding the pillars along the front, would constitute the perfection of a foreground to a scene, either of rural beauty, or of enriched and elaborate cultivation.

The *Wistaria* is quite as hardy as the Laburnum. [Much more hardy. Ed.] We have spoken of it fully as it deserves, and hope enough has been said to increase its cultivation, and to give it that diversity, so essential to the production and maintenance of interest. For our "*items*," we are indebted to the suggestions of a writer of known skill and experience.

Wm. W. Valk, M. D.

N. B. We have a small plant of the "*Wistaria rosea*," sent us from Belgium, and represented as handsomer than the sinensis. Yesterday we saw the fruit of the "*Grosielle cerise*," or Cherry Currant; it is fully equal to our highest anticipations, and the largest of all currants known. They measured over an inch in circumference. W. W. V.

Remarks.—Our correspondent has scarcely done justice to the merits of this—certainly one of the loveliest of all climbing plants. We have cultivated it in various situations for ten or twelve years, and find it perfectly hardy in all exposures. A single plant will cover hundreds of square feet, if simply trained upon trellis, wall, or building; or it may, by shortening the branches, be kept within the limits of a single upright pole, or the columns of a piazza. The months of April and May deck it with the most wonderful profusion of long clusters of blossoms; (a gentleman compared the grand specimen in Thorburn's garden, at Astoria, when in full bloom this year, to a "floral cataract of Niagara;") and old plants are more or less in bloom from May till November.

It is, in short, a climber for all places,—whether cottage, farm-house, or villa; and we hope, before long, to see it planted wherever there is the least refinement possessed by the inmates of country houses from Maine to Louisiana. Ed.

REMARKS ON NEW STRAWBERRIES.

BY G. W. HUNTSMAN, FLUSHING, L. I.

Dear Sir—In my last communication, I promised to make some further remarks upon new varieties of strawberries. This promise I will now endeavor to redeem, in part, at least.

Of the many new varieties lately introduced, I have noticed the following, though not, in all cases, under the most favorable circumstances for judging of their merits:

Black Prince,
Burr's New Pine,
Crimson Cone,
Profuse Scarlet, (Prince's,)
Boston Pine,
Iowa,
Cushing,
Bishop's Globe,
Abyssinian Prince,
Lizzie Randolph,
Taylor's Seedling.

—

Eberlein,
Charlotte, (Prince's,)
Primate, do.
Primordian, do.
Jenney's Seedling.

—

President,
Buist's Prize,
Burr's Seedling,

Burr's Mammoth,
North's Victory,
Willey.

I do not intend giving a description of each of these varieties, but to make a selection of five kinds which, in my opinion, possess qualities entitling them to notice. The first five are those I have selected. The *Black Prince* has been fully described in the Horticulturist. I can only say that it does not fall short of its description. Its peculiarly rich and sweet flavor render it the most desirable strawberry to eat out of hand. Indeed, it is not much improved by sugar; and in point of productiveness, it is not behind any other variety with which I am acquainted.

Burr's New Pine is another first rate pistillate variety, very productive, and of a rich sweet flavor. Fruit large, and uniformly short, conical, of a light crimson colour. Ripens about the same time as the *Black Prince*.

The *Crimson Cone*, known in the New-York market as the "Dutch berry," is a very desirable kind, coming in quite late. The fruit, though not of the first size, is very beautiful, being a bright crimson, and uniformly conical; it also has the property of keeping remarkably well after being picked; the flavor is rich acid. The plants possess great vigor, and should be planted farther apart than any other variety.

The *Profuse Scarlet* is a new variety, raised by W. R. Prince, from seed of the *Large Early Scarlet*, which it closely resembles, both in size, colour and flavor. It will, perhaps, average rather larger. It possesses a decided advantage over the *L. E. Scarlet* in being a *pistillate* plant, and therefore more uniformly productive. It will, I think, when known, supercede the Early Scarlet.

The *Boston Pine* is a superb early variety, requiring, however, good soil and high cultivation to obtain a good crop.

The first four of these are *pistillate*, and will bear well under almost any kind of cultivation, provided the ground is good, and they are duly impregnated. This latter office may be performed by the Boston Pine, which is a hermaphrodite plant. I am not certain but that the Boston Pine may be superceded by the *Eberlein*, or *Primate*, both of which are excellent and productive varieties.

There are others, beside those selected, possessing good qualities, which may entitle them to notice.

The *Charlotte* and *Jenney's Seedling* are both excellent varieties.

Allow me to make a few remarks upon the cultivation of the strawberry. I have found from my experience and observation, that while some kinds succeed tolerably well, under almost any mode of treatment, others, to bear well, require a particular mode of culture.

I will first notice the *Boston Pine*, which Mr. Hovey considers very productive, while others assert the contrary. I have seen this variety both productive and unproductive, according to the mode of treatment. When it has been planted in separate stools, kept clean of runners, and in good strong ground, it has proved highly productive; while on the contrary, when the plants were suffered to run into a thick mass, it scarcely bore any fruit.

The same remarks will apply to almost all hermaphrodite plants, bearing large fruit. The reason of this seems obvious enough, when it is remembered that these plants throw up generally many times more blossoms than pistillate varieties; when, therefore, they are crowded too thickly, they do not find sufficient nutriment, or the

plants individually are not sufficiently strong to perfect the fruit.

Pistillate varieties, as they do not throw up so many trusses, will succeed much better in thick beds. These remarks may explain the discrepancy which often occurs in the statements of different individuals about the productiveness of the same; and may, also, independently of climate, explain the reason why English cultivators are so much more successful in cultivating hermaphrodite plants, as they almost always keep the plants in stools under a high state of cultivation,—the runners being continually removed. The mode of cultivation has also a very decided influence upon the quality of the fruit. *Hovey's Seedling*, for instance, is very different in flavor when crowded in beds, from what it is when cultivated in open drills, and the fruit fully exposed to the influence of the sun. In the first case, the fruit is rather insipid; in the latter, it is of excellent quality. G. W. HUNTSMAN.

Flushing, July 10th, 1848.

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[The foregoing really sensible and practical remarks, on the culture of the different classes of strawberries, we publish with the greater pleasure because there has been so much said on this subject by prejudiced persons, who are too strongly biassed in favor of one or the other horn of the strawberry dilemma to judge impartially.

Mr. HUNTSMAN's remarks, respecting the influence different modes of cultivation have upon different varieties, corresponds exactly to our own views. Hermaphrodite sorts, well cultivated, may be made to produce very large crops. The advantage of growing pistillate sorts is, that a very careless or inferior mode of cultivation will suffice to produce crops equally large, or even larger; and, in this country, where labor is much scarcer and dearer than abroad, any mode of cultivation that saves labor will become the popular one.

We are inclined to rank the *Large Early Scarlet* as one of the most productive of strawberries, although it is an hermaphrodite, and not a pistillate sort. We have compared its product for two seasons past with that of some of the best pistillates, and find it quite equal. Its great hardiness, and the fact that it is one of the best sorts to plant, as a fertilizer, along with pistillate varieties, lead us to consider it still one of the most valuable. ED.]

STRAWBERRY CULTURE AND SELECTION OF VARIETIES.

BY WM. R. PRINCE, FLUSHING, N. Y.

IT is indispensable that the ground for strawberry beds be perfectly free from all weeds and their seeds. This may be effected by digging the soil several times at intervals; thus destroying all forthcoming weeds. The preferable soil is a rich loam that retains moisture, but sufficiently friable for the requisite filtration; this should be highly manured, but without the probability of introducing nauseous weeds therewith. The beds should be about four feet wide, and the plants set fifteen inches asunder; and new beds should be formed every second year. The best periods for planting, in all but the southern states, are August, September, and April. Strawberry plants are of three characters: 1st, staminate or male, *sterile;* 2d, hermaphrodite or bisex-

ual, *more or less productive;* 3d, pistillate, *very productive.* The two first have been usually spoken of as one by ourselves and others, when referring to impregnators; and the second has usually been termed staminate, when speaking of fruit bearing varieties. As these sexual characteristics are *permanent*, and as false impressions are conveyed by the terms, as hitherto applied, we deem it indispensable to correct the nomenclature by a true and correct application of these terms in future. In the culture of the pistillate varieties, it is indispensably necessary that they be accompanied by about one-twentieth of some staminate or hermaphrodite variety, which will render them invariably productive. This course was recommended in our Treatise on Horticulture in 1828, since which it has been adopted in Ohio and elsewhere. The pistillate varieties possess the great advantage, that they may be allowed to run together in a mass, and will, in this mode, bear profusely, and this is the most profitable course of culture; whereas, the hermaphrodite varieties, (with three or four peculiar exceptions,) will not produce a fair crop, unless they are cultivated as distinct plants and kept clear of runners. There can be no such event as a failure in the crops of pistillate varieties, (when accompanied by staminates or hermaphrodites.) *Every pistillate variety is productive*, varying only in abundance. The hermaphrodites may all be deemed *moderate bearers*, except where we have denoted otherwise; and the few exceptions mostly produce fruit of but medium size. The Primate, and possibly two or three other hermaphrodites, comprise the only varieties with large fruit that produce large crops. In selecting an impregnator to plant among pistillates, it is best to select a productive hermaphrodite variety, as this will prevent any loss of ground. In regard to hardihood, all the varieties we now cultivate, with the exception of the Montevideo Pine, will withstand the winters of the most northern states, by simply covering the beds during winter with four inches of straw or leaves.

DESCRIPTIONS OF TWENTY SELECT VARIETIES.

Profuse Scarlet.—A seedling from that favorite and earliest market variety, the Large Early Scarlet. The fruit is at maturity at the same period, and is of larger size than its parent, which it closely resembles in form, colour and flavor. The parent is hermaphrodite, and only a moderate bearer; but the present variety is *pistillate*, and bears profusely,—thus furnishing a most desirable acquisition, and one that has been anxiously sought for. Flowers small.

Bishop's Seedling or *Orange.*—This is very different from the crimson variety, erroneously so called, being a beautiful orange scarlet, with a profusion of clusters, unsurpassed by any other, of medium size, rounded. Flowers medium. *Pistillate.*

Black Prince.—Large, rounded, slightly projecting at the extremity, blackish crimson, very dark, in large clusters, very showy, sweet and excellent when fully ripe. Flowers medium. *Pistillate.*

Charlotte.—Large, obovate or rounded, dark scarlet, sweet, delicious, sprightly flavor, and very superior to most varieties; exceedingly productive. Some straw should be lain on the ground, as the size and abundance of the fruit causes it often to rest on the earth. The foliage is broad and luxuriant, and even more so than Hovey's Seedling, to which its habit greatly assimilates. Flowers medium. *Pistillate.*

Crimson Cone.—Large, elongated cone, bright crimson, very beautiful, good flavor, and fragrant; keeps remarkably well, and

estimable for market—very productive. A remarkably vigorous plant. Flowers above medium for the sex. *Pistillate.*

Crimson Pine.—Rather larger than the Hudson, of same form and colour, handsome, very productive, suitable for market. Flowers medium. *Hermaphrodite* and *pistillate* on distinct plants.

Cornucopia.—A magnificent seedling from the Hudson,—very large, conical, scarlet, good flavor—very productive—fine for market. Flowers medium. *Pistillate.*

Eberlein.—Early, medium size, conical, dark scarlet, remarkably productive; averages larger than Large Early Scarlet; ripens next after it and the Profuse Scarlet, and at the same period as the Iowa. Flowers medium. *Hermaphrodite.*

Burr's New Pine.—Very large, obovate or rounded, light crimson, beautiful, very sweet and fine flavor, detaches easily; very productive. Flowers large for the sex. *Pistillate.*

Burr's Rival Hudson.—Large, showy, dark scarlet, red inside, long jointed cone, flavor good when fully ripe,—much resembling, in form and flavor, its parent, the old Hudson; the berries in large clusters; very productive. The plant is very vigorous, with dark green foliage. Flowers medium. *Pistillate.*

Brilliant.—Large, conical, deep crimson, beautiful, excellent flavor; productive. The plant is very vigorous, and a seedling of the Crimson Cone. Flowers large. *Hermaphrodite.*

Cushing.—One of Dr. Brincklee's seedlings; very large, light and scarlet, obtuse cone, fine flavor; productive. Flowers large. *Hermaphrodite.*

Iowa.—Large, broad-rounded, sometimes depressed, seeds deeply imbedded, beautiful, light orange scarlet, not high flavored, but pleasant; early and productive,—a peculiar fruit. Flowers medium or under. *Hermaphrodite.*

Magnifique.—Very large, orange scarlet, rounded, splendid, pleasant flavor; very productive,—an extraordinary fruit. *Pistillate.*

Prolific Swaintsone.—Large, ovate, scarlet, fine flavor; productive,—an improvement on the old Swainstone, its parent. Flowers large. *Hermaphrodite.*

Primate.—A seedling from the Prince Albert, of extraordinary character; being the only hermaphrodite variety that produces large fruit and large crops; form conical, deep scarlet, splendid, good flavor; very productive; fine for market. Flowers medium.

Primordian.—Early, large, elongated cone, deep scarlet, beautiful; very productive; ripens with the Eberlein, next after the Large Early and Profuse Scarlet. Flowers small. *Pistillate.*

Prolific Hudson.—Medium to large, short cone, crimson, good flavor; very productive; ripens gradually; don't rot. Flowers medium. *Pistillate.*

Refulgent.—Medium to large, peculiar form, ovate with a neck, beautiful, bright scarlet, fine flavor; highly productive and estimable. Flowers small. *Pistillate.*

Unique Scarlet.—Large, purse shaped, light scarlet, sweet, rich, delicious flavor; a peculiar fruit. Flowers medium. *Hermaphrodite.*

Montevideo Pine.—A distinct species, producing fruit of monstrous size and of conical form, sometimes variable, and high pine-apple flavor; ripens late, and continues ten or twelve days after the other large varieties have passed. The plant is the strongest in growth of all strawberries; foliage large and vigorous; petioles, peduncles and runners, strong and downy; the blossoms very large, often the size of a

dollar. It succeeds here, and is well suited to the southern states, to which it must prove a most desirable acquisition, as the northern varieties do not thrive there. Above a dozen splendid varieties have been produced from the seeds of this estimable parent. *Hermaphrodite.*

Unique Prairie.—Called in Ohio—"Necked Pine;" but as it is a native of the western states, and has no affinity whatever with the Pine family, I have dropped the latter title. It is of peculiar form, ovate, with a very distinct neck, medium or rather large, light scarlet, indifferent flavor and too acid, except well sugared, or as preserves; foliage dark green, deeply grooved. Flowers medium. *Pistillate.*

Taylor's Seedling, is another prairie variety; medium to large, long oval, with a distinct neck, light bright orange scarlet, sweet and pleasant when fully ripe, but not high flavored; ripe soon after the Iowa. Flowers medium. *Pistillate.* W. R. P.

Flushing, July 11, 1848.

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[We hope Mr. PRINCE will exhibit some of these new seedling varieties of his own,—*Charlotte, Primate, Primordian*, &c., before the fruit committee of the Massachusetts or Pennsylvania Hort. Societies, next season, in order that a report may be made on their respective qualities. ED.]

THE GERANIUM AND ITS CULTURE.

BY GEORGE GLENNY.*

ENOUGH, in all conscience, has been written upon the subject of this favorite flower, and yet we must write once more. One would, however, think, that every cottage window was in itself a lesson, when we see the ruddy health and fine colour which characterize almost every plant we see in those situations. The truth is, that persons who grow plants for amusement only, are content with ordinary loam and dung, or even the common mould from a kitchen garden, and as they do not excite the plants, they remain in health, while others, who grow for exhibition, mix up excitable compost, which makes the plants grow very strong, but in this very strength there is danger. A slight check deranges their machinery, or, rather, their structure; and whole collections frequently get impaired in the colour of their foliage, and the disappointment is mortifying in the extreme. There is no staving off the mischief, because it is all too deeply seated before it shows itself, and often past recovery, as fine specimens, before anything wrong is indicated by the appearance. A person should never use exciting composts, unless he is constantly attending to his plants, because the higher they are grown, the more susceptible they are of damage; and *vice versa*, the more simple the compost, the less likely they are to be deranged in their economy, although they may not grow quite so rampant and strong. The great object of the cultivator for exhibition, according to the present fashion, should be strength, bushy habit, quantity of bloom, and colour of foliage. This is not to be accomplished by exciting composts, for rapid growth induces long instead of short joints, and nothing goes farther towards spoiling habit. Suppose the sticks, the scores of sticks, were removed from some of the gay-looking show geraniums, they would hang all over the pots—they having been excited into rapid and weakly growth, and unable to sustain their own weight. There is nothing so much wanted as a reform in this matter. The waste of time required to prop these miserable branches out at proper distances, can only be tolera-

* From the London Hort. Magazine.

ted by persons who have no notion of its value. Private establishments do not, in general, produce such specimens; and many who buy at large prices, get dissatisfied with their gardeners for not producing the plants as large and as handsome as those exhibited at the public shows. There is, however, a medium as to compost, and no one ought to go to extremes, except by way of experiment, and that should be with a very few of their plants, and not the best. The compost that does least harm, is vegetable mould and loam; hardly any proportions of these can be mischievous. In short, plants will grow in either of them without much danger to their constitution, although they may affect the first growth; but as we propose to treat of all the different stages of growth, the soil to be used, and every necessary particular, under their various heads, we need only say here, that we wish to see geraniums grown in good health and strength, supporting themselves, instead of being propped up with a hundred sticks, which are destructive to the nature of the flower and plant, discreditable to the gardener, and to the societies who encourage him; in short, it answers but one purpose, which is filling the tables, and a mass of imperfect blooms, instead of a reasonable quantity of noble flowers, is the result. Nevertheless, it is the fashion, and the prizes are too tempting for gardeners, who are generally ill paid, to resist. In obedience to the mania for such things, we shall be obliged to direct how to spoil as well as how to grow geraniums; but our mind has been always made up to one thing, and we shall pay attention to it as a necessary precaution against the all-absorbing propensity to admire large plants. If the public were shown how grand the flowers come when grown on the leading shoot, without cutting back, or stopping, when only three or four, or, perhaps, half a dozen lateral shoots appear, they would hardly know the same varieties; but if even these lateral shoots are taken off, and the whole strength is thrown into the leader, (which we should do, if we were going to show a single truss of the cut flower,) or, what is, perhaps, the best of all, to allow the leaders and the laterals that come naturally to make their growth, and as soon as the laterals show their buds, to pick them off, which is of great assistance to the main bloom, they would not be quite so fond of the enormous plants, and the victimized flowers, that crowd upon the artificially grown, and still more artificially supported specimens that now occupy their attention at shows, and literally disguise the varieties that are really good. It is quite notorious that a flower is never seen afterwards so good as when it is exhibited with its first bloom; and it is thought by some that the flowers degenerate. Let them stop back a currant tree, and constantly top the laterals, until they crowd it with comparatively weak shoots, and see if they get the flowers and fruit so large; but it is a strange fancy that, in geraniums, the art of gardening is reversed; instead of pruning out branches, to give light, air, and strength, to those remaining, that the plant may have less than its natural work to do.

THE CULTURE.

Soil.—To do justice to the culture of geraniums, it is necessary to be provided with several ingredients in their purest state. The first of these, and by far the most important, is the loam, formed by the turf, cut three inches thick, from a loamy pasture, and laid together until the entire vegetable matter is decomposed. To effect this, the turves should be laid grass to grass, and roots to roots, one on the other, till all of them are built into a stack. At the end of one year, this should be chopped down into slices, and thrown into a heap, some person picking out grubs, wire-worms, or other vermin, likely to be injurious to the plant; for it is notorious, that no earth is so full of such as that formed of rotten turves, the roots being in general so great a harbor for both wire-worms and grubs of various kinds, The object of chopping it down in these slices, is to detect them the more easily. When the entire stack is thus chopped to pieces and put into a heap, it should lay another year together, and it will be fit for use; and the heap of compost thus formed will be, as nearly as may be, half loam and half vegetable mould, and this compost would, of itself, grow almost anything. The only possible evil that could be, is retentiveness, or adhesiveness; but, unless the natural loam were very stiff indeed,

Fig. 14.—*The Geranium.*

even this could hardly occur. Provision, however, must be made for further mixture; but it may be necessary to provide for cases in which this compost of rotten turves cannot be had: and in this case, you must provide clean loam, remembering that the top spit of a pasture is always preferable to any other, and that it must not be too stiff. In this case, you ought to prepare even the staple heap so as to be as nearly a substitute for the rotted turf as possible. This may be done by putting a three-inch layer of the loam, and three inches of old cow-dung, and repeating these layers till the heap is as high as you intend to make it. Let this lay a year together, and chop it down, as in the case of turf, throwing it into a heap, to be packed, however, as you proceed, in the same way as before directed. The cow-dung is as nearly a compensation for the decayed vegetable, and the continued dressing that a pasture has from the animals which feed, as can be found, and such a compost will grow almost anything. But it may be necessary to use the plain loam, as you get it, instead of waiting a couple of years for it. In this case, all the other matters used with it must be thoroughly decomposed. Mr. Beck, who has been very successful, forms his staple heap, as we shall call the principal soil already described, by means of a top spit of turfy loam, in alternate layers with the muckings out of a stable, allowed to lie in a heap till the straw is decomposed. There will not, however, for general purposes, be found much difference in the growing qualities of the three heaps; and a fourth may be made, in the want of having pure loam without the turf being rotted, by putting half loam, one-fourth leaf mould, and one-fourth decomposed dung from an old melon bed. This should be well mixed and turned over as often as possible before nsing, and it must be used as a substitute for the other heaps, which we shall, for the sake of being understood, call loam. The other ingredients to provide himself with, are turfy peat, with the vegetable fibre among it, and silver sand. Thus prepared, we will venture to say, we shall be able to do without bone-dust, and other nostrums,

which are too commonly proposed to be used, and much to the detriment of a wholesome healthy growth.

BUYING THE PLANTS.

In commencing the culture of geraniums, it is desirable you should, in blooming time, visit the nurseries, and choose for yourself; or attend where you may see a great number prepared for exhibition. We prefer visiting the nurseries, because there are many plants grown that are not barbarized by the degrading use of props; and you are able to see whether a plant is of such a habit as will sustain itself without props; if there be any that will not, do not touch them, nor admit them into your collection. Choose plants of good strong bushy habit, with short strong joints, rich foliage, and compact round-looking flowers, with thick petals, smooth edges, and well-defined colours. They should also be with large trusses of flowers, which have footstalks long enough to spread out the bloom of each truss into a handsome head; regard should also be had to contrasting the colours of the collection, choosing the best of each colour or shade, such as the best pure white without a blotch, the best with a light blotch, and the best with a dark one. Then the best pink with a light, and the best with a dark, and so on, through all the best of the colours. Avoid those that are indefinite, and not bright and striking, for they do no good to a collection. The only exceptions to be made, are when there is any remarkably good point about them unconnected with their colour; for instance, the thickness of petal, or roundness of flower, with smoothness of edge. These points, in perfection, might tempt us to take one of bad colour for the sake of raising better colours with these good qualities. These plants are, for the most part, bought in thumb-pots out of the blooming season, though the old varieties may be had already in flower. We shall treat them as if in four-inch pots, well established, and in the autumn of the year, the time when most new varieties are sent out by Mr. Beck and other seedling growers.

THE FIRST SHIFT.

Get some six-inch pots, and put in a crock at the bottom to cover the hole, and some smaller ones to assist the drainage. Now prepare a compost with two parts from the loam heap and half a part of peat, rub it all through a very coarse sieve that would let a hazel nut through, because it removes any large portions of undecomposed matter, large stones, and hard lumps, while it does not affect that admission of air which is so essential to the roots. If this mixture seems sufficiently light and porous to let the water through very easily, there will be no occasion for anything else, but if it appears too adhesive, add half a part of silver sand. Mr. Beck uses his two-thirds from the loam heap and one-third of silver sand and peat mixed. The truth is, that neither the peat nor the silver sand is of use except in a mechanical way, to render the soil rather more pervious to air and water than it would be alone, and therefore the use of them must be for the most part dependent on the adhesive or non-adhesive quality of the loam. Turn out the ball from the four-inch pot, and having put a little soil into the larger one, and rubbed off the surface and the drainage, place the plant in the new pot, as low down as the base of the lower shoots or the lower leaves, for a geranium will bear deep potting, and strike new roots all the way up the stem; so that at every shift it may if desirable be set lower to make it more dwarf. If the plant consist of merely the upright cutting, and there are no lateral shoots, pinch out the top if you intend to make it dwarf and bushy; but if you desire to cultivate the plant for a single truss of flowers to cut, take out any side shoots that may come, and grow the plant up; but there is a better way than either, if we are to be content with one noble truss and a handsome plant, and that is, to allow it to make its own growth, which will be with one leading shoot and a few lateral branches, which form the plant into a bush at the lower part, while the leader is depended on for the principal and perhaps only bloom,—the way in which, according to our notion, one class ought always to be exhibited. We would have these classes, one for quantity of bloom, one for cut trusses of bloom, and one for plants with only a single truss of flower; but even the first class should be prevented from showing with props, for we maintain it is not only unnatural, but it has

caused the cultivation of many sorts quite incapable of sustaining themselves. Having, however, made the shift from the four-inch to the six-inch, they may be placed in the house to make their growth, which they soon will, and be ready for another shift. All this time they must have plenty of air, and not too much water. Mr. Beck, whom we are bound to look up to as a cultivator, on account of his excellent productions, recommends us to promote their growing freely until they have rooted well round the pots, then keep them quiet by withholding water as much as possible, and giving them abundance of air. We cannot dispute the propriety of promoting their growing freely, unless we could define the thing, by knowing the means by which they are to be grown freely. We do not consider the necessary growth from the autumn repotting, to the next shift, warrants our acceptation of the words. We, for instance, object to any more heat than is necessary to preserve the house from damp and frost, and we also object to any more water than is necessary to keep them going, and we give as much air as the mildness of weather will enable us to do from the time of the first to the period of the second shift, which with us would be as soon as the roots fairly get round the pots. We suspect that this is the system intended by Mr. Beck, although, for the sake of brevity, he has conveyed to our minds the notion that heat should be applied to promote growing freely. We should merely supply them moderately with moisture, liberally with air, and sparingly and reluctantly with heat. We should shift them as soon as the roots began to meet round the pot.

SECOND SHIFT.

From the six-inch pots we should remove to pots of eight-inch size. Putting crocks at the bottom as before, and using the same compost, we should remove the ball whole from one pot to the other, merely rubbing off any loose soil from the balls, and sinking the plants still lower if necessary, so as to bring down the foliage to the edge of the pot. Of the plants that are to be bushy, any shoots that are more vigorous than the others should be stopped, to promote an even growth. Those intended to grow a single truss for cutting, and the plants of which are not for any other purpose, may have their side shoots taken away as often as they come and as soon as they are large enough. The plants which are to be shown with a single truss on the leader may have any remarkably vigorous side shoots shortened, to prevent them growing ugly or uncouth, and also to check too much exuberance in any one branch. These plants will all be found vigorous, and where they throw up the leader trusses, select from the plants those which have the greatest number of flower buds on the main truss, and put them on one side. The others may bloom all their trusses, and will, though not tortured into a hundred bunches of insignificant flowers, show eight or ten perhaps as large as any two of the others. As the side shoots develop their blooms in the selected plants, let them be picked off, and allow none but the truss selected to bloom on the same plant. They will not be quite so large as the trusses on the plants deprived of their side shoots, but they will be much larger than any of the others. The selected plants will yield a centre truss but little inferior to them, and those which are all allowed to bloom, will be bold and handsome compared with the plants which are stopped back from time to time, to increase the number of branches and trusses intended to be propped into their places. But these require, as a general application, as soon as the trusses of bloom are formed, liquid cow dung water, made with one bulk of well rotted dung to six bulks of water, that is, a quart to six quarts, or a gallon to six gallons; this may be used once to three times watering with plain water, and continued until they bloom once out of four waterings. The cow dung is stirred with the water, and applied just the same way through a rose of a watering-pot, but not on the foliage.

BLOOMING.

As they approach the opening of the bloom they must be shaded with a very light cloth, and air should be given while the sun is powerful. About five, the house should be closed, and the plants be syringed carefully with a light rose on the syringe, and very clear water. The plants will bloom in perfection; and the difference between the plants pinched back and grown

into numerous stems and those only grown into one or a few, will be so striking as to make the flowers appear different varieties. Mr. Beck, who has a great dislike to sticks, but must nevertheless grow according to the rules of exhibitions, directs the sticks to be so placed, and to be of such length, that they cannot be seen above the base of the flower stalks; and he very properly remarks, and it is going part of the road with us, that the truss that will not support itself is unfit for the amateur's stage. We go farther, and maintain that the plant whose branches will not support themselves, is unfit for cultivation or exhibition, though we know many approved varieties are of this faulty nature.

GENERAL MANAGEMENT OF SHOW PLANTS.

The enormous specimens which we occasionally see at exhibitions, are as easily produced as small ones. There is no more merit, although there is more labor. A geranium could be grown as large as a gooseberry bush, with nothing but additional work, that is caused by the difference of weight.

GROWTH OF LARGE SPECIMENS.

A very simple set of rules decides the number of branches on a geranium, as well as on any other plant of similar habit. By taking away the top from a cutting as soon as it has struck and been potted singly, and down to within three eyes of the ground, these eyes will send forth three branches, and as soon as these have grown so as to have two eyes to leave on, they may be topped; from each of these, two more branches are emitted. This kind of check is to be accompanied by occasional shifts from small to larger pots as soon as the roots fairly reach the side, and begin to meet or grow round the outside: in the course of this treatment it will be found that many branches will come where they are in each other's way; those which would cross or crowd each other must be regulated by taking away the one most in the way, and due regard must be always had to the general form of the plant; but it is quite certain that by this constant plan of shortening the branches as they come forward the form may be adjusted to anything. In all the shifts the plant may be lowered in the pot if necessary, to bring down the foliage to the rim of the pot, for nothing looks worse than a vacancy between the pot and the foliage. It is only necessary to continue this till all the buds begin to rise and bloom, when they may all be picked off, and the plant may have all the air, and sun, and rain; in short, it may be placed in the open garden, where it would be sheltered from high winds. Towards the middle of August it may be deprived of water and cut in, and the branches may be thinned, so as to form a good skeleton of a plant. It may then be repotted. In cutting in the plant, you must recollect that it is to form the foundation of the next year's enlarged growth, and therefore it requires thinning as well as cutting back. You have to make allowance for a new and fresh growth from the old wood. As the plants will require all the air they can have safely, it is better to remove them to a pit or frame, where they can be left wholly uncovered when necessary, and be kept from cold, excess of wet, high wind, and the very hot and bright sun. As soon as there is any danger of frost they must be removed to the greenhouse, and abundant room must be given to the plants, to prevent them being drawn up. As the new growth comes you must rub off the shoots that are in each other's way, and stop any that are growing too vigorously, for the great object is to preserve a uniformity in the growth, and if any shoot or shoots take to growing faster than the rest, the discrepancy would be increased as the plant advanced. As soon as the shoots attain a length sufficient to leave two good joints, the tops may be taken off, and the plant may undergo the same treatment in every respect that is given to the younger ones. The abundance of shoots will enable you to choose which you leave on; and by occasionally examining them, and taking off the superfluous growth, the plants will become as handsome on a large scale as the smaller ones; but to follow the fashion of the day, you will be forced to place short sticks to the branches, so as to regulate the flowers, which would otherwise be thick in some places and thin in others; whereas it is considered necessary to have them constrained with a little gentle violence if required, so as to be at pretty nearly equal distances all over the plant

alike. It ought to be mentioned, that by the beginning of April the pots will be full of roots, and that, large as the pots may be, these enormous plants will require a further shift; and the only difficulty there is to encounter is in lifting about and handling such cumbrous and weighty subjects.

TEMPRRATURE.

The geranium should not be subject to checks and changes. In winter time the skill of the gardener is tried most, for there is no little difficulty in regulating the temperature so as to keep out frost without the house being at times too warm. It would be well if the temperature never exceeded 40° of a night and 50° by day; but this is too often reversed. The usual plan is to let them take their chance by day, if there is no frost, and to light fires in the evening, by which the temperature of the house is raised in the dark and lowered by daylight. In summer time, it is true, the sun raises the temperature by day; but the geranium makes its growth all the winter, when for weeks together we have no sun shining upon the house. The expense of firing is, we suspect, the ruling influence; and if not altogether so, the trouble regulates the rest; but certain it is that no man lights a fire if he can help it. With geraniums it is desirable to avoid fire heat altogether as much as it is possible; but so slight a frost is fatal to this plant, that a man dare not risk it in the night, when the glass is getting down too near the freezing point by day; but it would be far better to use fire by day, so as to warm the house, and let the closing suffice for all the early parts of the night, than keep them very cool all the day and light fires at night. In the culture of these plants it is worth while to have a rolling cloth to come down the glass to the brick-work, so that it may be let down in the evening, instead of lighting fires, for it keeps in the natural warmth many hours, and if attended to at night, and at all times when frost is indicated, the plants would be saved from the necessity of fires, and be all the stronger and better for it. At the same time it must always be borne in mind, that thirty-two is the freezing point, at which they take great damage, if they are not killed outright, and therefore that regard must be had to the prevention of too near an approach to that, either by covering or gentle fires, begun, however, in the morning, and not at night; so also provision must be made that the artificial heat does not raise the temperature above 45° by night at the most.

NECESSITY OF ROOM AND VENTILATION.

Few people who have not paid attention to the subject, are aware of the necessity of giving the plants room; many crowd the pots together so closely that the plants all but touch each other. There is hardly anything more detrimental to their general health. It is true, they live, and bloom, and, to ordinary observers, appear very pretty; but place one of them by the side of a truly healthy plant, and you will observe such a contrast as to excite astonishment; the foliage paler, the leaves smaller, the stems slighter and weaker altogether, the flowers thin and distorted; such are the fruits of keeping plants too close together. There ought to be as much room between one plant and another as half the diameter of the plant, that light and air may not be impeded, but the entire plant be open to the influence of both; nothing should induce a grower to crowd them, for it is better to throw half away, and grow the other half well, than to spoil all.

FUMIGATING THE PLANTS.

There is no positive rule for this; it should be done frequently, without waiting for the appearance of the aphides, for when they come it is too late; mischief is done in a short time by the green fly, even before it can be noticed, except with strict examination. The best mode of fumigating is with coarse strong tobacco, in proper fumigating bellows; but it can also be done with some hot charcoal in a flower-pot, and putting the tobacco in it; or by putting the nozzle of the common bellows to a hole in the side of a flower-pot, such as are made in many pots for extra drainage, and so blowing the lighted tobacco. The smoke must fill the house completely, even to the ground, which it touches last. The gardener may operate very well till the smoke fills the upper part down to his head; he may then sit down, and puff again until it reaches him so much lower; and he may kneel, and at length lay down, and find no quantity of smoke next the

ground. However, the most complete way is to have a hole in the door, through which the nozzle of the fumigating bellows may be put, and they can be worked from the outside without the slightest inconvenience. Care should be taken not to overdo it. It may be easily seen when the house is properly filled with smoke. The next morning they should be syringed with a fine rose. Some fumigate once a month; others very closely examine for the green fly, so that one could hardly escape them, and only fumigate when they discover them; it is, however, indispensable that they get well smoked when the buds show, and before they bloom, however much or little they may have been attended to in this particular before.

WATERING.

All plants should be watered with liquid of the same temperature as the house they are in. Those who are economical collect all the rain water from the roofs of their houses, and convey it into tanks within the building, for rain water is far better than all other, and river water is next; but thousands of plants are destroyed in health by the application of spring water from wells. When you are obliged to use spring water, it ought to be exposed to the sun for days in shallow vessels; but it is far better to avoid it, if possible, and to economize the rain water as the best possible way of providing a proper moisture for plants of all sorts. The geraniums do not like too much wet; they had better temporarily flag than have moisture when they do not want it, for an excess causes the leaves to turn colour and to fall, and even the best of the leaves to be spotted with a sort of mildew, much after the manner of carnations when they get the damp; examine them well, therefore, before you water, and convince yourself they require it before you give it them.

CUTTING IN AND STRIKING CUTTINGS.

Geraniums in healthy growth, and particularly when they are being grown for exhibitions, can always spare cuttings; for what with stopping the branches and thinning out the lateral shoots when too crowded, there is never any want of cuttings if we wish to propagate; but there is a period for cutting in all plants without necessarily forming monsters, as we have already described. When they have done blooming, and, if necessary, done seeding, let the plants have no more water for some days, and when the soil is pretty dry, cut them in closer than we directed for the monster plants; in fact, they should be cut in so close as to allow of only sufficient eyes to form a new moderate sized plant next year. They should then be kept dry a few days, to heal their wounds, and afterwards trimmed at the roots; all the matted fibres removed, and even the strong roots cut back a little, and the plants, so trimmed, repotted in much smaller pots. These may be shut up close in a frame a few days, but bottom heat, if it can be had, hastens the making of new roots, when they may be preserved through the winter as we have already described. The cuttings from these plants may be struck almost like weeds; the shortest joint will make a plant, and it is only necessary to cut the stem at bottom, close to the base of a leaf, and place it in the soil with one joint above; nay, the geranium strikes so freely, that if it answered any good purpose they will grow from eyes like the grape vine. Pots full of these cuttings may be covered with bell glasses; or the space that a hand-glass would cover may be stuck full of them on the common border: they may be rapidly struck in a gentle common hot-bed, [or out of doors in a shaded border;] but it would be more difficult to prevent their striking than to strike them, place them in soil where you can or where you will. In the ordinary way they will strike under a month; but, assisted with bottom heat and close covering, they will root in ten or twelve days. They are then potted in sixty-sized pots, and watered and attended till they are ready to send out, or kept till they have thoroughly rooted round the pots.

RAISING FROM SEED.

The proper choice of seeding plants must be made according to what you want; half a dozen of the best varieties may be planted out in the open air in May, when the weather is settled, and where no others are near; or they may be inoculated with any sorts you wish to work from for improvements. For instance, you take well shaped thick petalled flowers to seed from; take

out all the anthers as soon as you can get hold of them, and when the pistil becomes glutinous take the anthers from some flower with a good quality that you wish to obtain on thick petalled flowers, and put the dust on the pistil of those you are to seed from. The most easy method of conveying the powder from the anthers of a flower is on a camel's-hair pencil; but it is the same thing in effect if you take the flower and touch the pistil of the seeding plant with the anthers, for enough powder is sure to leave the anthers and attach itself to the pistil to answer all the purposes of fertilization. The plants to be seeded will need little or no care, unless they have to be covered in very stormy weather. The truss may be gathered when the seed is nearly ripe; and by hanging it up, or laying it down in the sun, it will ripen, and the seed must be looked after if any of it escapes; to prevent this, however, as it dries, it is well to put it in shallow boxes or drawers to dry. This seed may be sown in the spring, in wide-mouthed pots of soil such as we have recommended for general culture. The seeds should be sown thinly, so as not to crowd each other, because you are quite as likely to waste a good one as a bad one in the event of losing any; place it in the green-house, or, if you like to hasten it, you may raise it on a hot-bed; but where the geraniums are preparing for bloom, and the temperature is moderate, will do very well. Place a bell glass over the seeds till they vegetate, when they may have air, which you can give by uncovering them. As soon as they are up and large enough to take hold of, prick them out an inch apart in other large pots, for a great body of earth is far less liable to changes than a small one, and therefore there is less danger of their suffering from dryness. Here they may keep growing until they begin to be crowded, when they may be put into sixty-sized pots, well drained, and filled with the compost recommended for the ordinary culture. When these pots are filled with roots, change them to forty-eight-sized pots, and from them, as soon as necessary, to size thirty-two, in which they may bloom, when you give away, or throw away all that are not better than you possess already; and if you cannot do this very readily, cut off all the blooms, to prevent their spoiling any seed that may be disposed to set on the best of the flowers in the collection. For all the good they are, they may be turned into the open air, or into frames; or, if you have a house devoted to seedlings, and there are but few good out of a large number, the good ones may be removed to another house, and those which are of no other use may be left in the place they occupy, to use for cut flowers, as people are not hypercritical as to the forms of a geranium in a bouquet. When a seedling is found very good, so that there is no doubt about eventually naming and propagating it, the sooner all the spare pieces can be taken off and struck, the better, because cuttings struck early become plants in time to propagate from again; and from a single cutting taken in April or May many others can be obtained before the autumn; while the original plant, denuded of some of its branches, pushes into fresh growth, and affords the means of rapidly increasing the variety.

PROPERTIES OF THE GERANIUM OR PELARGONIUM.

1. The petals should be thick, broad, blunt, and smooth at the edges, and slightly cupped.

2. The flower should be circular, higher at the edges than in the centre (so as to form rather a hollow, though by no means a deeply cupped bloom,) without puckering or frilling; and where the petals lap over each other, the indentation caused by the join should be hardly perceptible.

3. The petals should lie close on each other, so as to appear a whole flower rather than a five-petalled flower.

4. The stem should be straight, strong, elastic, carrying the blooms well above the foliage. The footstalks of the individual flowers should be stiff, and of sufficient length to allow the flowers to show themselves in an even head, fitting compactly edge to edge, and forming a uniform bold truss.

5. The colour should be bright and dense, whether it be scarlet, crimson, rose colour, purple, lilac, or any of the modifications; the spots on the upper petals should be boldly contrasted with the ground, and the darker the better: both upper petals

should be alike, both side petals alike, and the lower petal uniform.

6. All white grounds should be very pure; and the colours, no matter what they be, on the white, should be decided, well defined, and by no means flush into the white.

7. The spots on the upper petals, or the marks in any other, should not break through to the edge.

8. Colours being a matter of taste, do not affect the real properties so much as other points, unless it be on the score of novelty; on this ground a bright scarlet would be desirable, and a black spot. We have plenty of approaches to both, but none very near.

9. The plant should be shrubby in its habit, the foliage close, and of a rich bright green, the joints short and strong, able to support themselves in every part without assistance. The flower should be large, not less than five in a truss, and come at the end of every shoot.

The obvious faults of most geraniums are, long and pointed lower petals; uneven, twisted, notched, or puckered edges; long footstalks, which make the truss loose and open; weak shoots, and stalks that will not hold up the flowers without propping, which destroys the appearance of the plant altogether; small leaves and long joints, which make the plant open, the habit gawky, and the foliage poor.

REMARKS ON THE CULTURE OF NATIVE GRAPES.

BY D., NEW-YORK.

The best of our native grapes — such as the Isabella and Catawba — are not equal in flavor, it must be admitted, to the finest table grapes of Europe; yet, when thoroughly ripened by the hot sun of the middle states, they are a valuable fruit for the dessert in autumn; and as they are easily kept after maturity till February or March, they must be considered one of the most desirable of our hardy fruits.

Some remarks on their cultivation, based upon a practice of ten years past, may, perhaps, interest some of your readers not already skilled in this matter.

After training the native grapes in a great variety of modes, I must be allowed to give it as my opinion that where large and regular crops of the finest fruit is desired, the vine must be kept within comparatively narrow bounds. Our native grapes have greater natural luxuriance than the European species; I have myself had one vine to produce 1200 perfect clusters in a single year; and have known several cases of single Isabella vines covering whole arbors of 40 or 50 feet in length. Notwithstanding this, there cannot be a doubt that small vines, kept within narrow bounds, and closely and regularly pruned, will give a much larger product, and bear more uniform crops, on a given space of ground, than large vines occupying the same soil and space. In the latter, you have the difficulty of a large amount of old wood to contend against, and the extra quantity of manure which grown large plants require to produce a corresponding effect upon them.

It is, perhaps, not easy to give a satisfactory limit for the size of the vines for open trellis culture; but my favorite size (for an upright trellis, 7 feet high,) is 6 feet apart from vine to vine. Placed at this distance, I do not find the least trouble in making my vines produce a given number of bunches every season, without in the least exhausting the roots, so far as I am yet able to judge.

The favorite specific manure for the grape-vine with me, is *wood ashes*. I am in the habit of making a hollow basin, some three feet in diameter, around each vine, after stirring the surface in the spring. In this basin I scatter fresh wood ashes, at the rate of half a peck to each vine. As soon as the vines commence growing, I begin to give them weekly rations of soap-suds,—one of the very best fertilizers for the native grape. My kitchen servants are instructed to save all the soap-suds of the weekly washing, and pour them into a hogshead, sunk in the ground to receive them. These soap-suds are afterwards poured into the basins formed at the base of each vine; and, dissolving a portion of the ashes, (deposited there in the spring,) they carry down to the roots just the specific stimulus that the grape-vine most needs.

I have found, by actual experiment, that vines treated in this way, of the same age and size, and in the same soil with other similar vines, treated in the common mode of culture, uniformly bear fruit from *one-third* to *one-half* larger in size, and usually richer and higher flavored in quality. The product well repays one for the extra labor, to say nothing of increased beauty of appearance.

I very much prefer *autumn* to any other season for making the annual pruning of the grape-vine. If made in the autumn, as soon as the leaves drop, you have the advantage of an accumulation in the remaining buds of all the stock of nourishment, [organizable matter—Ed.,] at that season, distributed by the plant to each and every bud and portion of its system. By the first of December, if not earlier in this climate, all this process of accumulation and distribution is over; and, consequently, in pruning in February and March you cut off, with the young wood, a considerable part of the nourishment which would have been deposited in the remaining buds at early autumn pruning. This advantage is very visible to the eye in the growth and production of vines pruned at the two seasons; and it is greatly in favor of autumn pruning.

A number of persons, I find, are planting *seeds* of the Isabella and Catawba grapes, in order to obtain new sorts. They will, many of them, be disappointed (like myself) in finding the seedlings only producing grapes inferior and more pulpy than the parents. A much more certain and satisfactory mode, is to fertilize the blossoms of the native grapes with pollen of the Black Hamburgh, Muscadine, and other first rate foreign sorts. I am, sir,

Respectfully yours, D.

New-York, July, 1848.

NEW MIXTURE TO DRIVE AWAY INSECTS.

BY AN OLD GARDENER, PHILADELPHIA.

Sir—I see in your Horticulturist the inquiry, started by several of your correspondents,—what is the best means of driving away or destroying rose bugs, striped bugs, and other troublesome insects, deleterious in the garden?

I have been in the habit of using, for three years or more, a mixture, first made known to me by a German farmer, that I am much pleased with. In almost every case in which I have applied it, success has followed its application; and the insects

have been driven away, and the plants preserved.

The mixture is a very simple one. Take some dry ground *plaster of Paris*, [gypsum,] spread it on the barn floor, and sprinkle over it, from a bottle, *spirits of turpentine* — turning over the plaster so as to slightly *moisten* the whole. Let it dry, and then rub it or pound it slightly till it is quite fine again.

Now it is ready for use; and to use it, you have only to scatter it over the leaves or stems of plants liable to be infested or attacked by insects. In order to have it adhere to the foliage, it is best to use it early in the morning, while the leaves are wet with dew.

I have found it effectually to protect melons and cucumbers from the striped bug, grape-vines from the small white fly, and even drive away the rose bug from such plants as it was applied to. If you will publish an account of it, perhaps your readers will make a trial of its virtues for themselves. Your humble servant,

AN OLD GARDENER.

Philadelphia, July 16, 1848.

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[We have had an account lately of the use of a mixture, quite similar to this, from a farmer and orchardist in Westchester co., N. Y. It is certainly deserving of attention. Oil of turpentine is very offensive to most insects; and the mixture described owes its virtue, no doubt, to the turpentine odor. ED.]

NEW OR RARE FRUITS THAT HAVE PROVED EXCELLENT.

WE have much satisfaction in recommending the following varieties of fruit. They have now all been proved in this climate, and we can recommend them with confidence to the attention of fruit growers:

I. LARGE EARLY APRICOT.

This variety, received by us from RIVERS, the English nurseryman, has fruited for three years past in our garden; and we consider it a great acquisition to our standard fruits. The fruit is perfectly ripe now, (July 10th.) Its form and size are accurately represented in the accompanying outline. Its beauty of colour, however, we cannot give here. This is deep orange, with a spotted red cheek, of unusual brilliancy; indeed, the specimens which we have had this season, on a common standard tree, have exceeded in beauty those of any other variety of apricot that we have hitherto seen. The flavor of this variety is excellent, very much superior to the *Roman* and *Masculine*,—the early sorts, in common cultivation. It proves an abundant bearer in the strong, heavy soil of our fruit garden, and certainly, regarding the very early period of its maturity,—while the Moorpark and other fine apricots are yet quite green. It must be admitted to be, as yet, the largest, handsomest, and best of early apricots.

In Languedoc, and the south of France, where this variety is thought to have originated, it is called *Abricot de St. Jean*, from its ripening there about St. John's day, (26th of June.) With us, it comes to maturity along with the *Roman* and *Dubois' Early;* that is, during the first ten days of July. The description of this variety, in our *Fruits and Fruit Trees*, is quite correct. The flesh, however, is of a rather pale orange colour.

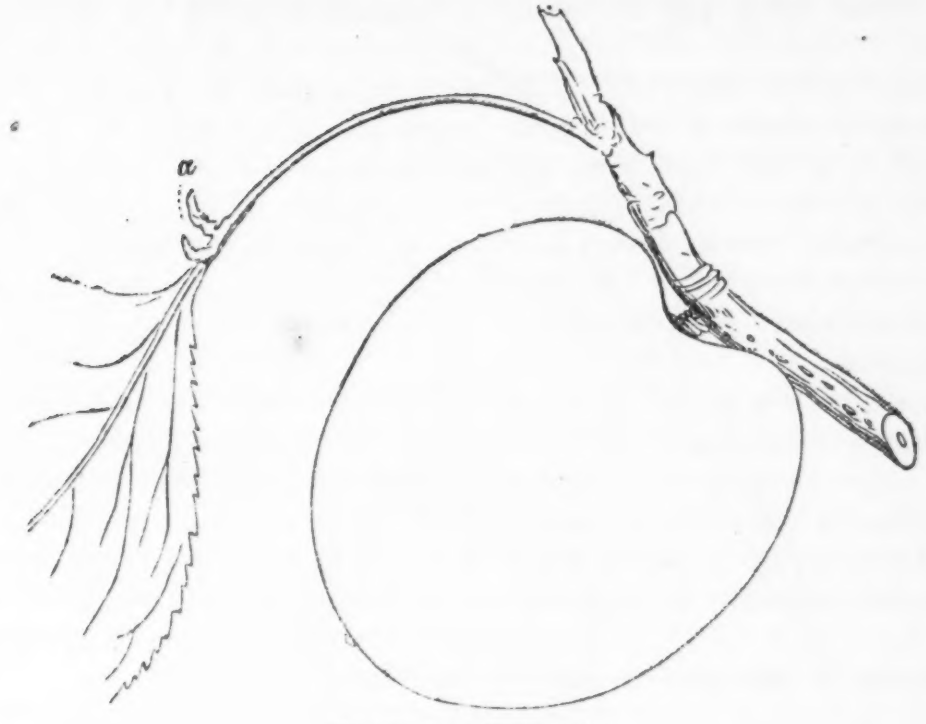

Fig. 15.—*Large Early Apricot.*

The Large Early Apricot is pretty readily distinguished by its foliage, which is large; its leaves tapering more towards the footstalks than most others, and frequently marked with little ear-like appendages, (Fig. 15, *a*,) which occupy the positions of the usual leaf glands.

II. BURR'S NEW PINE STRAWBERRY.

We have this season had an opportunity of tasting this new strawberry, which is admitted to be the finest of the different seedlings produced by Mr. John Burr of Columbus, Ohio, and which especially elicited the commendations of the Cincinnati Horticultural Society last season.

We do not hesitate to pronounce it one of the best, and, perhaps, the very best, American strawberry yet raised; and, comparing our own opinion with those of intelligent growers, both at the east and west, we think there is little doubt that *Burr's New Pine* will take its place among the three or four very best sorts yet known for general cultivation in this climate.

It is a *pistillate* variety, and, therefore, bears large crops. The berries are borne in large clusters, and are of very uniform size. The plant also appears to be completely hardy, and the foliage is handsome and vigorous.

The following is the pomological description of this variety: Berries large—but scarcely of the largest size—of regular and uniform shape, short, conical in outline; colour light crimson, or a pale *strawberry-colour;* flavor sweet, rich and aromatic, —much superior in this respect to *Hovey's Seedling*, and many other large varieties. Flowers pistillate.

We find that Mr. BARRY, of the *Genesee Farmer*, says of this variety—"at this time, we think, all things considered, that it has no superior; and those who plant it in well prepared soil, cannot fail to reap a rich and abundant crop." Our correspondent, Mr. HUNTSMAN, of Flushing, also gives it a high character in the present number of this journal.

Fig. 16.—*Burr's New Pine Strawberry.*

III. BUTTNER'S YELLOW CHERRY.

This novel cherry is noticed in our work on fruits, with a short description by Mr. THOMPSON, of the London Hort. Society. At that time, it had not borne in this country. We have had a good crop of Buttner's Yellow, however, this season, and can with confidence speak of it as a capital cherry, well worthy of the attention of amateurs. Our tree is yet young, but bears moderate crops.

Buttner's Yellow Cherry has two merits to recommend it, in addition to its good quality. In the first place, it is the only decidedly *yellow* cherry that we have seen, and is, therefore, a novelty in the dessert; in the second place, its season of maturity is as late, or a few days later, than *Downer's Red;* that is, a week or ten days after the other Bigarreau and Heart cherries are gone. It cannot, therefore, but be considered a decided acquisition. The tree

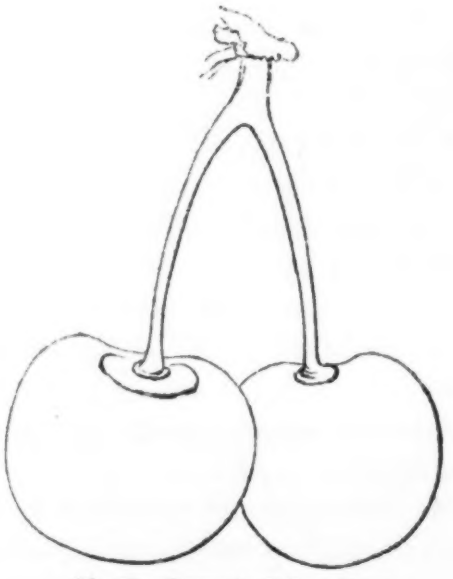

Fig. 17.—*Buttner's Yellow Cherry.*

is one of large and vigorous growth. The accompanying outline, (Fig. 17,) was taken from specimens before us while we write. The description is as follows:

Fruit rather large, obtuse, heart-shaped, distinctly flattened at the insertion of the

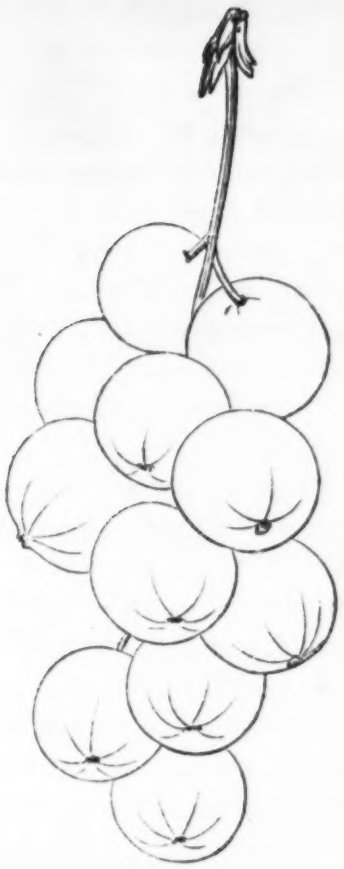

Fig. 18.—*Cherry Currant.*

stalk. Colour pure creamy yellow, (the skin somewhat opaque.) Stalk rather short and thick. Flesh yellowish white, firm, crisp and juicy, with a sweet and agreeable flavor. Stone quite small, ovate.

IV. THE CHERRY CURRANT.

This really extraordinary currant was noticed in vol. 1, p. 439, of this journal. It has since been imported by a number of nurserymen and amateurs, but has, as yet, only fruited (so far as we have heard,) in one place in this country,—the nursery of Messrs. PARSONS of Flushing, N. Y.

We are glad to find that this variety proves to be fully equal to the expectations formed of it on first perusing the account of it, given in the French *Annales*. We give an outline of the fruit, and there can be little doubt that it will attain still larger size, upon stronger and well established plants.

The origin of the Cherry Currant is somwhat obscure. It was received from Italy, mixed with other common currants, by M. SENECLANGE, of the department of Loire. When it produced fruit, it was named the Cherry Currant, (*Groseille cerise*,) in allusion to the unusually large size of the berries. The fruit is double as large as that of the other currants, round, of a light red colour, and borne in clusters rather shorter than those of the common Dutch currant. The shrub is luxuriant in its growth, the foliage very large, and appears to be perfectly hardy. It ripens its fruit at the usual season, and the flavor is quite acid — decidedly more so than the Red Dutch currant.

PROF. SHEPARD ON AGRICULTURAL SCHOOLS.

[WE have lately received, from Prof. C. U. SHEPARD, of Amherst college, a copy of an address, delivered by him at Springfield and Northampton, before the agricultural societies of those portions of Massachusetts.

The address is one highly interesting throughout. But the concluding part of it demands more than a passing comment. It is devoted to the subject of *agricultural schools;* a subject which is largely occupying the public mind at the present moment, and which, to the rural population of the United States, is one of far more vital importance than the present generation of farmers are in the habit of considering it.

Prof. SHEPARD has discussed it with so much point, that we take the liberty of laying his remarks before our readers.

Quite a number of the agricultural schools, which have been started in various parts of the country, have entirely failed. This failure has no doubt arisen, in many cases, from a want of proper organization and direction in the schools themselves; but, we think, still more frequently from a want of sufficient funds or endowment to place them on a secure and proper basis at the outset. An agricultural school can be of little benefit in this country, except it embodies the soundest practical and scientific ability in the country. Smatterers in science and slip-shod farmers are not the materials out of which to form an institution to teach improved modes of husbandry; modes by which land may be made more productive, and capital profitably employed. And it may be laid down as an axiom, that persons of real ability, whether as successful practical farmers or scientific men, will never be found in any schools where their ability is not well paid for. The best talent in any department of human knowledge or labor, in America, always finds its reward. The ablest chemist commands the largest salary; the best practical farmer raises the largest crops.

Now, we think it may be further stated, as a fact not admitting of dispute, that men of this stamp will not leave their avocations — respectable and profitable as they are — and undertake any institution where their talents are indifferently paid for, and the success and position of the institution doubtful and uncertain. Hence, agricultural schools generally, cannot succeed, unless they are well endowed in the outset, either by public or private means,—with funds sufficient to command men of the first abilities; we mean men of tried practical ability— not speculative men.

For this reason, we are strongly in favor of having at least one large agricultural school in each one of the great agricultural states, supported at the cost of such state. The great body of the people of such a state is composed of farmers — its great interest is agriculture; and, next to *common schools*, (which have for years past been so liberally supported by some of the states,) we conceive no public education more important, or better worthy of being put upon the public charge, than agricultural schools.

ROSWELL COLT, Esq., of New-Jersey, has, we learn, petitioned Congress lately to set apart and appropriate a certain portion of the *public lands* for the use of each state,* the income from the sales of which shall be used for the maintenance of a great public farm school in such state. We see no objection to this plan, which, without imposing any direct tax, would speedily furnish those ample means by which alone, as we believe, really useful and practical institutions of this kind can be maintained. ED.]

But leaving the more elementary schools, I proceed to speak with more detail of the agricultural school, a topic which is beginning to take a deep hold of the public mind.

Many persons appear to think, that our college course can be so modified, as to fulfill at the same time, the literary and the agricultural requisition. It does not appear to me, that such a plan is likely to succeed. Heretofore most certainly, whatever else the college has afforded, it has turned out few practical farmers. Even those, who enter as well drilled and expert in farming operations, by the time they reach the terminus of their course, if they do justice to the college studies and become thoroughly imbued with the spirit of the place, become rather awkward on the farm; and it very

* Ten miles square to each state.

soon begins to appear, that to be college-learnt, is to be farm-unlearnt. And I hardly know of men more to be pitied, than those who from feeble health or any other cause, have failed in a professional or literary career (to prepare for which, the college course is chiefly intended) and who are obliged to fall back upon the farm for a livelihood. In all the practical labors of husbandry, they seem to have lost the art of taking hold of things by the smooth handle; and their blunders in live-stock, are almost sure to make them the laughing-stock of their neighbors. Now there is nothing surprising in this, if we consider the object of college education. The college is not intended for persons who are to occupy themselves much with physical matters. Even the boys understand this perfectly well; and it is to be feared, that not a few importune their parents to gain admission there from no higher motive, than to get clear of muscular effort; though it is generally observed, that such are equally shy of intellectual exertion. No: the college is a place for the training of persons, who, if they are ever to work at all, must do so, through the medium of mind, as scholars, as statesmen, as clergymen, or in the medical or legal profession. Nothing can be more unreasonable than to suppose, that we see the practical use of the sciences to mankind, in the lives of our college graduates. Why, the college course is chiefly made up of a study of the literature and philosophy of the ancients, to whom our sciences were a dead letter, and of the elements of mathematics and geometry, to which is added a sprinkling of metaphysics and logic, and considerable drilling in English composition and elocution. On these studies, and good morals, the discipline and the honors of the college turn. Lectures are given indeed, on some of the modern sciences, but less with a view to their bearing on the arts of life, than to the purpose of intellectual discipline and general accomplishment. No teacher would be tolerated, who should more than incidentally allude to any common use, like that of economical profit, that could be made of them. The college is not the place for learning rules of thrift. It pre-supposes a degree of independence; and in cases where this is not enjoyed, it takes it for granted, that money-making is to be held as a secondary consideration with all who partake of its benefits. The college graduate is never to seek glory in wealth, but in knowledge, and in usefulness of a lofty kind to his fellow-men. This I take to be the true theory of the college, and of literary life in general. Both hold themselves at the most respectful remove possible, from all contact with matter, and the every day labors of men engaged in the arts. I might perhaps afford you an illustration of the truth of this representation. A president of one of these institutions, on being shown through the physical department of another, the best endowed in natural sciences of any in the country, on taking leave of the distinguished professor, who had been his conductor, begged to know of what conceivable use to mankind, were all such provisions! Here was a distinguished scholar, at the head of an American college, who had got so completely away from matter, as not to be conscious, that a knowledge of its properties was of the least utility to mankind!

Take one other exemplification of the difficulty, which the mere literary man experiences, in estimating aright, the practical business of life. One of the most eminent of American scholars, and at the same a distinguished statesman, argued a short time ago in Congress, against the employment of the Smithsonian fund, for purposes of practical advantage,—using the word practical here, in its common acceptation, and of course, in opposition to its college and literary use. He entertained the House of Representatives with a strain of fine thoughts, expressed in lofty diction, in favor of appropriating the money, to the purchase of a library. In the course of his remarks, he insisted, that "a laboratory was a mere charnel house, and that experiments are but the dry bones of science." He would direct the attention of mankind away from matter "to those great subjects," as he was pleased to style them, "which are not bounded by the three dimensions, which are not ponderable, not cognizable by any of the senses." In the halls of the American Congress, in the year of our Lord eighteen hundred and forty-six, asked this polished orator, in dead earnest, "What

have our boasted researches taught us to accomplish in the industrial arts, that the cunning workmen of Egypt and Tyre and Greece could not do, three thousand years ago?" And to crown the climax, he claimed, that our independence was declared and maintained by scholars! Listen to the declaration, ye shades of Washington—the farmer and civil engineer, of Franklin—the printer and electrician, and of Jefferson—the man who has left this testimony of scholastic pursuits,—"the business of life," says he, "is with matter, that gives tangible results; handling that, we come at the knowledge of the axe, the plough, the steamboat, and everything useful in life; but from metaphysical speculations, I have never seen one useful result." Fortunately the argument of the scholar, on the occasion, fell into something very like the laboratory he so much abhorred, where it was first analyzed, and then weighed in the balance of common sense. And the result of the whole was, that in spite of it, that noblest bequest of a practical chemist, to a practical people, was saved, from what would have been little better, than a sequestration.

The time has fairly arrived, when society should understand what it has a right to expect from the college; when it should know this at least, that it is not the most likely place to look for amelioration in the practical arts, especially in that of agriculture. The college has enough to do, to qualify for head-work. There must be some other institution, in which young men can be taught to work on matter, as well as upon mind. To send a lad to college whom you intend to make a farmer, is putting him on the wrong track. The four years spent there, would be an episode, a parenthesis in the preparation for active life on a farm. I say not that it would disqualify him from leading the life of a gentleman, provided his means were sufficiently ample; but it would assuredly be a bad thing for him, ever to take off his gloves on a farm, after he had touched his diploma.*

I should shrink from the attempt even, to draw out the plan of such an institution, as is required to meet the wants of this greatest of all the branches of practical industry. To frame such a scheme, will demand no small share of deliberation and forecast. No institutions are now in existence, upon which they can be directly modeled. In this state of the case, it may not perhaps be deemed impertinent for me, to direct the attention of this audience, to what has been done in Europe in behalf of an allied art or profession, which sustains a very close relation to agriculture. I allude to that of mining. Like agriculture, it requires the use of numerous sciences. As the farmer must know his crops, together with many other plants which are either useless or noxious, so the miner must be able to recognize his ores, and those associated mineral substances, which are either worthless or injurious. As the farmer must understand his soils and subsoils, and the connection of both with the rock formations in which they originated, so the miner must comprehend the various strata, which include his veins and beds of ore. The different processes employed in harvesting and preparing crops for the markets, are in some sense, analogous to the raising and dressing of ores; while draining, surveying, and architecture, are required in both. Farming and mining both make a constant and similar use of chemistry, in the work of analysis. There is indeed this difference, that the labors of the miner are attended with much greater risks as to remuneration, and with greatly increased dangers to health and life. But it is reasonable, nevertheless, that institutions expressly contrived for the benefit of the miner, and which have been nearly a century in existence, should throw some light upon those we would invent for the use of the farmer.

The most ancient of these institutions, is

* In these remarks upon the inadequacy of the college proper, for preparing persons for the practice of the arts, I trust that I shall not be thought wanting in a proper regard for these institutions. Having, either as pupil or teacher, passed the greatest part of my life in connection with the college, I can but accord to it, the highest respect and even filial affection: but this veneration is solely on account of the important, and truly noble end it accomplishes, in laying the foundation of professional or literary eminence; and not on account of its direct service to the manual arts. These it never has embraced within its plan; nor is it easy to see how any change can ever be made in this respect, which shall fully answer the wants of practical men: although there is nothing to prevent the existence of an agricultural school in immediate connection with a college, whose scientific faculty might even assist in a school of arts, and in this way, materially abridge the expensiveness of such an institution.

that of Freiberg, in Saxony. It was founded in 1765 by Prince Xaver, and early placed under the control of the celebrated mineralogist, Werner. At the present time, it has eleven professors, on the following branches: viz. General chemistry, technical chemistry, analytical chemistry, mineralogy and geology in all their branches, natural philosophy, the pure and the higher mathematics, mathematics applied, mining machinery, general surveying and practical geometry, mining jurisprudence and correspondence, and the art of mining. In addition to the corps of professors, it has a surveyor, a draftsman, an assay-master, and a teacher of French. Candidates for admission must produce certificates of health, character, and a certain proficiency in the common branches of school education. A limited number are supported by the government. The lectures open in October and terminate in July, the vacations being devoted to mining excursions. The instruction is communicated by lectures, illustrated by figures on the black-board, by experiments, by specimens and by models, as the nature of the subjects may require. Mondays are devoted to the inspection of mines in the vicinity,—there being within a circuit of three miles, no less than 100; in which, are about 200 vertical shafts and 250,000 fathoms of adit, wherein may be viewed every species of timbering and masonry. The pupils are required to keep a fair copy of their notes, and of all their lectures. At the end of each month, they undergo a rigid examination upon all their studies; and at the close of each year, are rewarded according to the result. The course extends through a period of four years; and is admirably contrived for insuring correct practice, in every detail of the art, and at the same time, a thorough comprehension of the principles on which that practice depends.

Another of these institutions, most worthy perhaps of being described, was founded in 1770, at Schemnetz in Hungary, by the Empress, Maria Theresa, by whom it was also endowed, with great liberality. During the 3d year of the course at Schemnetz, the pupils are required on one day of each week, to go through a portion of some mine, and to make out a written report of everything that concerns its condition. Some of the poorer young men, even take jobs in the mine, which serve in part, to defray their expenses. The semi-annual examinations are held, not for the vain purpose of showing off, but for determining in the strictest manner, what each pupil has learned. The questions are written on small slips of paper, and are drawn out by lot by the students, who give the answers on the spot. The most successful are rewarded, by having the charge of their education almost wholly remitted; while those who fall below a certain standard, are forced to relinquish all hope of ever obtaining government employ. The number of pupils in this institution is, at present, between three and four hundred. * * * *

But I return to the agricultural school, upon whose office I have endeavored to throw some light, by describing what has been done by foreign institutions, in behalf of the sister art of mining. Its general province and scope must, after what has been said, suggest themselves to my hearers. Without attempting to enumerate the branches it should teach, or the number of instructors it should have, I will only venture to state my hearty concurrence in the suggestion, which some of the leading papers in this state have made, that it be located near the region of the Connecticut valley; and that there be connected with it, a tract of land sufficiently ample for cultivating every variety of crop, and for rearing every species of stock, suited to our climate; and still farther, to add, that it should have cabinets rich in the necessary apparatus, a botanic garden, representing all the great families of plants, a laboratory in which the work of analysis should never stop, and a severity of discipline equal to that of West Point.

It would be an easy task to go on pointing out other advantages of such an institution, but I dare not presume farther upon your patience, than to allude to one or two, in addition to those already hinted at, in the progress of this discourse. It would enable many a lad, not born on the farm, the sons of men in professional life, or of merchants and artisans, to prepare them-

selves for agricultural pursuits. It would be a safety-valve to the college, now disproportionately thronged, and would sometimes free it of a youth, whose frolicsome career betrays, that it was not purely intellectual occupation for which nature intended him, but rather, that admirable combination of hand-work with head-work, which the farm so well supplies.

And besides the improved methods of husbandry, which would be likely to grow out of such an institution, may we not reasonably calculate upon its affording important aid in contending with those diseases, to which the most important plants and fruits seem liable, as the result of long, artificial cultivation. Consider for a moment, the present position of society from the threatened loss of the potato crop. Here is a disease in the tuber of this plant, that thus far, defies all scrutiny. We have neither found its cause nor its remedy. And yet, as in a time of pestilence among men, few are so absurd as to look for mitigation or relief, except from the resources of science; so here, the most obtuse are probably convinced, that our only hope is in a similar direction. And what a splendid gift would it be, if science shall be able to restore to us the independence we possessed in this plant, prior to the year 1840! For the potato is a vegetable, which the rich man knows not how to forego; and one, which places the poor man above want. With a shelter from the weather, and one or two acres of ground to plant with this tuber, man may subsist at almost any distance from the miller, the baker, the butcher, and I may almost add, the doctor. It suits all tastes, flourishes in nearly all climates, and is eminently nutritious and healthful. Its cultivation demands but little labor, and when the earth has ripened the tubers, they are harvested without trouble, and cooked without expense. A few faggots in summer will boil them, and in winter the necessary heat is supplied without expense. There is no waste of time in the processes of milling, sifting, kneading, baking, seasoning, jointing or carving. There is nothing deficient nor superfluous in a well boiled potato. As soon as it is cooked, it opens by chinks, lets fall its thin pellicle upon the platter, and with a little salt, butter or milk, is ready for the unfastidious appetite of the hungry man. Start not back with surprise, at the idea of subsisting upon the potato alone, ye who think it necessary to load your tables with all the dainty viands of the market, with fish, flesh and fowl, seasoned with oils and spices, and eaten perhaps with wines,—start not back, I say, with feigned disgust, until you are able to display in your own pampered persons, a firmer muscle, a more beau ideal outline, and a healthier red, than the potato-fed peasantry of Ireland and Scotland once showed you, as you passed their cabin doors! No; the chemical physiologist will tell you, that the well ripened potato, when properly cooked, contains every element, that man requires for nutrition; and in the best proportions, in which they are found in any plant whatever. There is the abounding supply of starch, for enabling him to maintain the process of breathing, and for generating the necessary warmth of body; there is the nitrogen for contributing to the growth and renovation of organs; the lime and the phosphorus for the bones, and all the salts which a healthy circulation demands. In fine, the potato may well be called the universal plant; and the disease under which it now labors, is therefore, an universal calamity. If any agricultural institution should ever be so fortunate as to make us acquainted with the means of controlling it, its name would quickly rank by the side of the proudest universities; and if the great discovery should proceed from a single individual, his name would live, when those of the greatest generals and conquerors, have become as uncouth and strange to human utterance, as their deeds were unfriendly and opposed to human happiness.

It is indeed a pleasing task, to anticipate the glories of the new day of improvement and success, which is dawning upon the cultivators of the soil. Already has the era of amelioration arrived. The number and the zeal of associations, like yours, are significant omens. The results before and around us, are most encouraging; and the high standard of improvement everywhere visible, is a sure presage of ultimate triumph. A new vigor has been infused into the farmer's life; and though an old

and venerable occupation, it has, is some sort, taken on a new youth; and this youth seems inspired with insatiable desires and the most exulting hope. Be encouraged then with the old German proverb, that what we strive after in youth, we shall attain to fullness in old age; and concerning which, Goethe, the poet and the naturalist, has given this fine commentary, "that our wishes are presentiments of the faculties which lie within us, and harbingers of that, which we shall be in a condition to perform." Thus, I easily persuade myself, it will prove in your case, in the distinguished zeal you are exhibiting for the improvement of your profession.

When your example shall be adopted, throughout the counties of New-England, a new order of thrift and intelligence will be discerned among the rural population. The more certain success, which will then wait upon the husbandman, shall supercede the farther necessity for his emigration towards the setting sun; and the higher intelligence and refinement, which shall then prevail, will cease to urge with such undesirable force, such troops of our most promising country youth, to seek their fortunes in city life; where alas, the temptations to vice and the rush of competition, so often frustrate all their hopes. Then will it be seen, that the most infertile of our districts, will be competent to sustain in comfort and wealth even, a vastly augmented population. Then will it most clearly appear, that there exists no real incompatibility, between the labors of the field and a certain degree of mental culture and simple refinement; but on the contrary, that the uncontaminated air of heaven, which the farmer breathes, the beautiful forms with which nature everywhere surrounds him, in her productions, and the constant witness, which he is, in his labors, of the beneficial operation of great natural laws, powerfully conspire to the formation of a pure and noble character; and may well justify the expectation, that the country will continue to accomplish more fully in time to come, than she has done even in the past, her destiny, of supplying to science and literature her most successful proficients, to the learned professions their most distinguished ornaments, and to our great towns their most valued citizens; while she is still able to retain enough of solid worth and attractions at home, to enable her to make reprisals on the city, by recovering to her own blissful retirement, many a man, who in youth, with sound constitution and upright purpose, entered the great mart of trade, but who amid all his successes kept alive enough of nature in his soul, to bring him back again to her peaceful retreats, in the evening of his days.

To the spirit of agricultural improvement, we look also, with hope, that it will extinguish all lingering remains of military ambition; and that under its benign and humanizing sway, we shall become more emulous of re-conquering the wastes within our borders, than of adding new wildernesses to our already too extended domain. What room is there for brilliant achievement even in New-England, in expelling those unsightly enemies of the husbandman, that have been permitted to overrun so large a portion of our fair inheritance. Turn your eyes, ye martial spirits of Massachusetts, to that army of golden rods, waving their yellow plumes upon a thousand hills; see yonder dauntless array of life-everlastings, that crowd the wide champaigns; see our highways, and the contiguous fields, beset by insolent hordes of mullen and thistles, and fair meadows, where once flourished the golden grain, now covered with base daisies and sorrel. What fields of glory await you, at your very doors. To dispossess these daring invaders, shall yield you a hundred fold more of true glory, than to follow the stripes and stars from Labrador to Cape Horn! In the coming age of improvement, who shall say, that to subdue and eradicate one of these pests to the farmer, will not bring as bright a chaplet of fame, as it now can do, to trample down a human foe? Who shall say, that he who shall prove himself foremost in peaceful labors like these that exalt human happiness, may not reap the highest gift of a grateful country, as surely as he who holds himself ready to barter his conscience in the shambles of party, or risk his life in the barbarous perils of war?

REVIEW.

TRANSACTIONS OF THE NEW-YORK STATE AGRICULTURAL SOCIETY—*with an abstract of the Proceedings of the County Agricultural Societies.* Vol. vii, 1847. [1 vol., 8vo., 799 pages.]

THIS is a most excellent volume, replete with valuable practical essays, reports of successful experiments, details of skilful farming operations, agricultural addresses, &c., besides the report of the proceedings of the state society.

Altogether, it is one of the most valuable contributions to scientific and practical agriculture that has been produced in the United States; and its general distribution among the people cannot fail to have a most beneficial effect.

After some familiarity with the difficulty of drawing out and making public the most valuable information, viz., that possessed by the soundest practical and scientific men in the country, we feel bound to say that we think Mr. JOHNSON, the present able secretary of the society, within whose province this volume especially falls, has performed his duty most wisely and skilfully. We are, indeed, willing to go much farther, and say that Mr. JOHNSON's exertions have effected more for the cause of agriculture, in this and the previous vols. of Transactions, than all the other labors of the society put together, have done in the same time. Those who know how much the importance and influence of a society like this depends on the intelligence and energy of one, two or three of its leading officers,—men who must be earnestly devoted to the cause, will rank as highly as ourselves the invaluable services of the present secretary of the state society.

Among the most valuable articles, we notice one by Professor JOHNSTON, of England, "*On the Economical Use of Bones as a Manure, and on their Solution in Sulphuric Acid.*"

Our horticultural readers are, perhaps, even more fully aware than most farmers of the value of bones. *Phosphate of lime* is so essential an organic constituent in the *pear*, and some other fruit trees, that no good orchardist or gardener will henceforth be guilty of the extravagance of *wasting bones.*

The difficulty, however, hitherto experienced by many persons, has been to bring the bones, easily collected upon every farm and about every slaughter-house, to a fit condition for applying to the land. Bone mills are only to be found here and there; and in some parts of the country, the cost of transportation of bone-dust has been so considerable as to put a stop to its use. Fortunately, this difficulty has been overcome lately by a cheap, simple, and rapid mode of *dissolving* bones by sulphuric acid, now largely employed by English agriculturists. The mode of effecting this is so important to nine-tenths of our readers, that we extract the formula from Professor JOHNSTON's essay:

§ 6. *Methods adopted for Increasing the sensible Effect of Bones.*

Without referring much to the effect which bones might theoretically be expected to produce, it has been observed by practical men that they may be made to act more quickly and more beneficially by the adoption of certain previous precautions, such as,—

1. *Reducing them to fine powder.* I have already alluded to the fact ascertained by experience, that the finer the powder, the more immediate and the more sensible the effect of bones. But practical men were afraid to venture too far in diminishing the weight of manure, added to the soil. Bulk was considered to enter as an element into the fertilizing capabilities of any substance. Many leases even prohibit the addition of less than 16 or 20 bushels of bones, when used alone in raising turnips. But

under the guidance of science, both tenants and proprietors will, by and by, learn to estimate more correctly what the crops really carry off, and what the soil therefore requires. Thus a strictly scientific economy will be established, and no more of any thing will be added to his fields than the farmer knows and *understands* to be necessary to maintain them in a state of permanent fertility.

2. *Heating the bones.* In some districts their action in hastening forward the young turnip, and bringing it quickly into rough leaf, where it is safe from the attacks of the fly, is increased by laying the bones in a heap, and covering them over with earth, for a week or ten days before they are drilled into the land. Left in this state, they heat, soften, and begin to change or decompose; and thus, when laid in the drills near the seed, they are ready to furnish nourishment to the young plant as soon as the roots first thrust themselves downwards from the sprouting seed.

3. *Fermenting them with dung,* or the same decomposition is effected and carried further by mixing the bones with farm yard manure, and leaving the mixture awhile to ferment. It was the result of trials made by thirteen different persons, and which are recorded in the Doncaster report, that a given weight of bones, when mixed and fermented with farm yard manure, invariably produced a more beneficial effect, than the same weight of dry-bone dust, applied to the same crop and upon the same soil.

The advantage which results from these several methods, arises from the effects which they produce, either in diminishing the mechanical coherence of the particles of the bone, or in altering by incipient decomposition, the chemical state of the organic matter it contains. None of them, however, sufficiently effect these objects, though I do not doubt that fine bone-dust, fermented for two or three months with farm-yard manure, and occasionally turned over, would be brought into a condition more nearly approaching to guano, in its fertilizing virtue, than any other form of bones which has hitherto been *generally* employed.

§ 7. *Decomposing and Dissolving Bones by means of Sulphuric Acid.*

But another mode of preparing bones has recently been introduced, and for two or three years has been extensively employed as a part of the ordinary husbandry, especially by some of the Scottish farmers. This mode consists in decomposing, and more or less dissolving bones in sulphuric acid, (oil of vitriol). This may be done in various ways, and the prepared bones may either be applied in a liquid state with a watering cart, or may be dried and sowed with a drilling machine, or broad cast, like ordinary bone or rape dust.

a. The bones in the form of bone dust, or where bone mills are not at hand, simply broken in pieces with a hammer, may be put into a cast iron, stone, earthen-ware, or strong wooden vessel, mixed with half their weight of boiling water, and then with half their weight of the strong oil of vitrol of the shops, stirring constantly while the latter is slowly poured in. A powerful boiling up takes place which gradually subsides.

By occasional stirring, the whole assumes the appearance of a thick paste, the pieces of bone gradually disappear, and after a week or ten days the whole may be taken out and mixed with a little charcoal powder, charred peat, saw dust or fine dry earth, to make it dry enough to pass through the drill, and may thus be immediately applied to the land. It would, however, be better to prepare the bones a month at least before using them, and lay them up in a heap for a while, with a view to their more perfect decomposition. When the pieces of bone are large, this is especially desirable, as otherwise they will not be fully decomposed without a larger addition both of water and acid.

b. Or the acid and bones as above, may, after a couple of days, be mixed with a quantity of light, friable soil, and laid up into a heap for seven or eight weeks with occasional turning. The bones thus heated, decompose and dry up, so as to be ready for putting into the drills without farther preparation. This method, however, requires more acid, and it is not unusual in employing it, to take equal weights of acid and bones. It may be, some practical men, indeed, employ invariably equal weights of acid and bones, while others are satisfied by mixing the bones with one-third or even one-fourth of their weight of acid. I would myself employ not less than a half.

c. Or equal weights of bones in the form of dust, of boiling water and of acid* may be mixed together and occasionally stirred for a week or ten days, and when the particles of bone have nearly disappeared, from 50 to 100 times more water may be added to the mixture, and the liquid thus diluted may be applied by a water cart. If it is to be used upon grass-land in the spring, or to young corn, it will be safer to dilute it with 200 waters, but fifty waters (by weight,) will be enough if it is to be applied to turnip drills. A common watering cart used for other liquid manures, will serve for the former purpose—for applying it to the drills a very ingenious addition of tubes to this cart has been contrived by Mr. Wagstaff and employed by him under the direction of the Duke of Richmond at Gordon castle.

This method of applying the bones in the liquid form, is, no doubt the most perfect, but it is also the most troublesome and expensive, and may not, therefore, come so soon into general use, though it may ultimately prove the most profitable.

Instead of sulphuric acid, the muriatic acid or spirits of salt, has been, indeed, was first, tried for the dissolution of bones, but the former appears at present, for several reasons, to be preferred.

We will only add to the foregoing, that a number of experiments with dissolved bones were made by the Highland Society of Scotland, the result of which were:—

"1. That four, and in some cases, even two bushels of dissolved bones, will produce as good a crop of turnips as sixteen or

* A gallon of water weighs 10lbs, a gallon of acid 17 or 18lbs.

twenty bushels applied in the usual form, [dry bone-dust.] The crops also start more quickly, and grow more rapidly.

"2. That the more complete the state of solution or subdivision of the bones, the greater the effect. Hence, when applied in the liquid state, the benefit is most apparent.'

Other persons besides ourselves, who cultivate heavy compact soils, have no doubt been quite disappointed in the want of effect of bone manure upon such soils, compared with their admirable action on lighter and more porous soils. Prof. JOHNSTON has suggested, in the following paragraphs, the cause of this want of action on heavy soils, and the remedy:

§ 10. *Ought any other substances to be mixed with the Dissolved Bones?*

Bones are known to exercise a comparatively feeble and uncertain action upon stiff and undrained clays, and it may, therefore, be reasonably asked by some if the action of dissolved bones will be more certain upon such soils than the bones in their natural state? We may, I think, answer this in the affirmative, since the principal cause of the less conspicuous effect of bones upon such soils is to be found in their tenacity and coldness, by which the particles of bones are shut out from the air, and their decomposition is retarded.

But, inasmuch as bones do not contain the whole of the substances which plants require, and as some of those which are present in bones, the salts of soda, for example, are in small quantity only, it may be reasonably asked again if the dissolved bones would not be improved, and their efficacy increased, and rendered more *sure*, were an addition of certain substances to be made to them. Of this I think there can be little doubt, though the necessity and nature of such additions will depend much upon the nature of the soil to which they are to be applied. A small per centage of pearl ash or wood ashes, of nitrate of soda, or common salt, and a sulphate of magnesia—5 lbs. each of the potash and soda salts, and 10 lbs. of the magnesia salt to each 100 lbs. of bones—would render the mixture more suited to every soil and crop. At the same time, if the soil like those formed from the felspar rocks abound in potash, or like those which border the sea, be rich in soda, or like those which owe their origin to the slates, or to the magnesian limestones, contain already too much magnesia, any addition to these several substances would obviously be thrown away. The principle of adding such things being recognised as sound, the knowledge and discretion of the farmer must be exercised in determining how far such additions are likely to be profitable, or to make a small preliminary experiment by way of trial.

Among other valuable essays, we would particularly notice the following: *On Subsoil Ploughing*, by JOHN MALLORY, of Yates county; *Experiments in Feeding Swine*, by J. M. BACON, Bordentown, N. J.; *Experiments in the Management of Cheese Dairies*, by ALONZO L. FISH, of Herkimer co.; *Experiments in Draining*, by Messrs. SPOOR, of Troy, and WOOLSEY of Long-Island; Prof. NORTON'S excellent chemico-agricultural address, and an interesting paper by Mr. GOODRICH, of Utica, on the potato rot.

Besides these, there is a great deal of valuable information on butter making, sheep husbandry, &c. &c., besides a great amount of valuable practical details of the modes of growing farm crops, practiced by the most successful farmers.

There is considerable horticultural information also collected in this volume. The committee on fruits, who gave last year a list of select apples, which they recommended for general cultivation in this state, have this year continued their labors by presenting select lists of other fruits, with descriptions and figures of the same, copied from our work on *Fruits*. We annex a list of the sorts recommended by them, that our readers may see what varieties are most popular in the northern portion of the state.

PEARS.—Madeleine, Bloodgood, Dearborn's Seedling, Bartlett, Fondante d'Automne, Seckel, White Doyenne, Swan's Orange, Louise Bonne de Jersey, Stevens' Genesee, Beurre Bosc, Gray Doyenne, Washington, Beurre d'Aremberg, Winter Nelis, Glout Morceau, Vicar of Winkfield.

PLUMS.—Jefferson, Green Gage, Washington, Huling's Supurb, Schenectady Catherine, Bleecker's Gage, Lawrence's Favorite, Columbia, Prince's Imperial Gage, Coe's Golden Drop, Prune d'Agen, Peach Plumb, Denniston's Albany Beauty, Denniston's Red.

PEACHES.—Early Tillottson, Grosse Mignonne, Cooledge's Favorite, Red Rareripe, Royal George, Crawford's Early, Malta, George 4th, Brevoort, Morris' White Rareripe.

CHERRIES.—May Duke, Elton, Florence, Black Tartarian.

STRAWBERRIES.—Hovey's Seedling, Large Early Scarlet, Swainstone Seedling.

GRAPES.—Isabella and Catawba.

A new winter apple, called the "Wagener Apple," has received a premium from the society, and is recommended for cultivation, as a variety "remarkable for its agreeable taste and flavor." It originated near Penn Yan, Yates county, N. Y.

From the discussions at the various meetings of the society, we extract some interesting remarks, which afford good evidence of the adaptation of central and western New-York for *fruit growing*, and the profits of this species of cultivation.

"Mr. PARDEE, from Wayne, gave lucid details of the fruit trade in the county from which he came. Something like 50,000 barrels of apples had been shipped from Palmyra, and there was a large section of the county which found its place of export in other villages on the canal; such as Newark, Lyons, Clyde. The average net profit on the cultivation of fruit he estimated at from $100 to $150 per acre.

In addition to the trade in green fruit, over 10,000 barrels of dried apples had been purchased by the dealers in Palmyra during the winter. The fruit in many varieties was much larger and finer than those in the vicinity of the North River.

The growing of peaches and plums was also a large item. At the same time that the dried apples had been an article of purchase, nearly 1000 bushels of dried peaches had been bought. He had in his own experience noticed that the overloaded tree was always the bearer of but indifferent fruit.—The influence of the winds on Lake Ontario softened the climate and kept off the frost, and he could not but characterise Wayne County as one of the first for fruit in the State. The Virgalieu [Doyenne] pear attains to great richness, and a size much larger than any he had seen in the markets of New-York. It grows well, and the yield is abundant. The Catawba and Isabella grape are very superior."

"Mr. JOHNSON said from a statement received from Oneida County, he had learned several interesting statistics of the trade in apples. A part of four towns only, out of many in that county, had shipped the present season 18,000 barrels, at a price varying from 62½ cts. to $1. In one orchard, planted with cultivated fruits, of about six acres, there had been sent in 1845, 1000 barrels to market, for which had been realized $1000; in 1846 the returns were not so large, but in 1847, the crop was again large, about 1000 barrels, which gave from six acres about $1000, a larger income than could be realized from any grain crop. Another gentleman had one Virgalieu pear tree from which he sold fruit in 1847, to the amount of $50. In Orleans county he had been told that the *fruit trade had become one of the most profitable sources of revenue* to the farmers; they shipped their fruit, and it became an object there, as it should be everywhere, to select fruit of that character which should command the highest price in market. They begin to understand that it costs less to raise good fruit than bad. One dollar a barrel [in the interior of the State] in the field, for the home market, is a good evidence of its value. When he was abroad, in London, he had seen apples in Covent Garden Market, very handsomely arranged under a glass case, and labelled "American Newtown Pippins," and when he desired to taste them, he found that the price of each was 6d. stg! It is not alone with flour and beef and pork that we supply England, but there is not in all England such apples as ours. American apples are set before their friends on all occasions, by distinguished families on all great occasions. A market is also opening to us in the West Indies, which will require large supplies. The New-England States must look to us in a measure, for their supply of fruit. The Southern and Western States buy largely; there markets are open to our farmers, and the growth of fruit, of good fruit, deserves their best attention. The Western States are competing with us fearfully for the grain market, and it needs but our attention to have the flag of the Empire State waive triumphantly over the fruit culture. New-York, is probably, as a whole, the best fruit growing region in the world.

It is all important for those who send their apples to market to have them *properly packed*. The apples from the Pelham farm sell for $6 a barrel in New-York, while Western fruit of equally good flavor, of the same varieties, frequently does not command over $2; this arises from the character which has been given to apples packed by Mr. PELL. Purchasers *know* what they buy, and if our cultivators of choice apples would take the same care, and have their barrels *branded* with their name, they would receive a like return, on the *character* of their brand being established."

It would be easy to occupy many pages of this journal with valuable extracts from this volume of *Transactions*. But such of our readers as are most interested in the subjects embraced within its scope, will doubtless find access to the work itself.

After bestowing most cheerfully this well-earned praise upon the *printed* "Transactions" of the state society, we can scarcely leave the subject without saying a few words about one of its most important transactions which is annually *acted*, not printed—we mean the *great fairs* or exhibitions held, for some years past, in September.

The great agricultural wealth and resources of the "Empire State," as New-York is often termed, brings to these annual fairs great numbers of persons from

other states, and even from the most distant parts of the Union. As many as 30,000 or 40,000 persons are frequently present. It is a fact, not to be denied, that those persons have frequently returned home completely and justly disappointed in these exhibitions,—disappointed in the agreggate amount of articles shown,—disappointed in their quality,—and, most of all, disappointed in the arrangement and mode of conducting the fair.

Last year, this was especially the case. In some respects, as we learned from a large number of those who attended the exhibition, the agricultural display was not superior to that of many county societies; while the horticultural show was inferior, in the variety and quality of the products, to that of many weekly exhibitions of the Massachusetts Horticultural Society. In the latter department, indeed, the shows of the state society have been deteriorating for several years past, until they reached a point at Saratoga quite below criticism.

We mention this, not to censure the officers of the society, or the committees of management, all of whom, on the contrary, deserve praise for the efforts made by them to render the exhibitions as complete as possible; but to point out what, in our humble judgment, is a *capital error* in the regulations of the society, and which we predict, so long as it remains in force, will effectually prevent its annual fairs from fairly representing the agricultural skill and resources of the state; in fact, from being anything more than a large, discordant, second or third-rate show, equally unsatisfactory to the exhibitor and the spectator.

We allude, of course, to that regulation of the society which compels it to change the locality of its annual fair, every season, from Albany to Auburn, Rochester, Syracuse, Saratoga, &c. &c.

Every one at all familiar with the management of those agricultural or horticultural societies, whose shows are really satisfactory, very well knows that the direction or management of these exhibitions is a matter of much *acquired skill and experience;* that it is always done by a few persons, thoroughly familiar from long practice with the necessary details, so that all mistakes, confusion and oversights are prevented; so that every valuable product, within the reach of the society, is *drawn out* for exhibition, and all indifferent or unworthy articles are at once rejected by competent judges. In other words, to conduct a great fair of this kind well, it is indispensable that the *working committees should be persons thoroughly experienced, and fully competent to the task in hand.*

Now what is the state of things at the state shows? Exactly the reverse of all this. One year, for instance, the fair is held at Albany. Great efforts are made; a large quantity of farm and garden products are brought together, a good portion of which is, however, of very indifferent quality,—while from proper inducements not having been presented, a great deal of *materiel* of the first class, has not been brought out at all. The committees appointed are almost all new to their task,—some entirely unfit for it, some not working men, and therefore useless,—and nearly all entirely inexperienced, and therefore incompetent. The result is, that the fair is indifferently arranged, great numbers of exhibitors are dissatisfied, and the next year withhold their articles altogether, to the great injury of the subsequent shows.

By the time the Fair is over, those of the committee who are really working men, have found out the short-comings of the exhibitions and have seen the weak points of their own management; have ascertained

how, if the thing were to be repeated, *they* could present it to the public in a far more satisfactory condition. In other words, they have earned a little valuable experience.—But this amounts to nothing. The Society, instead of availing itself of this experience thus acquired at Albany or any other given point, throws it all away, by abandoning that place and holding its Fair the succeeding year at some other point in the State 100 or 200 miles distant. The arrangements are put into the hands of fresh local committees, who are as inexperienced as the first, and therefore almost wholly ignorant of what is to be done and how to do it; consequently the exhibition is a jumble; articles are carried there and lost sight of, or placed entirely out of view; 30,000 people are brought together in some small town where there is accommodation for only 5,000; rail-roads out of the usual routes are overloaded with passengers, who are detained hours where they ought to be minutes, and the consequence is that instead of a well ordered, satisfactory, and instructive display of the best products of the soil, four-fifths of the spectators leave the ground fully impressed that the State Fairs are a "great humbug."

Now we may be entirely wrong in our opinion, but it seems very clear to us and to others with whom we have conversed, that these miserable exhibitions, which are almost valueless for practical good, and are certain sooner or later if persisted in, to ruin the credit of the State Society, might be exchanged for Shows of which the State might well be proud, and for an influence most decidedly beneficial to the cause of agriculture, by one simple reform, tc wit, in the manner of holding them.

This is nothing more than to confine them to two central and accessible points, choosing the neighborhoods of those cities properly located, and affording abundant accommodation for the thousands of visitors who resort to the Fair: places from which the accumulated knowledge may be easily distributed to all other parts of the State. Take for example Albany and Rochester, (or Buffalo)—the two most central and accessible cities in the great agricultural portions of the State. Let the Annual Fair he held *for 5 years* at Albany, and then for the next 5 years at Rochester. Let competent, intelligent working committees be employed and *well paid* by the Society to ascertain and bring out all the finest products of the State; and, when collected, to arrange the whole systematically and satisfactorily, so that everything may be seen, and every person shall have an opportunity to see—so that there shall be no fine stock injured for want of shelter, nor fruits nor plants of the commonest sorts left unexhibited or wrongly labelled, and, above all, no crowd of human beings decoyed to a village where there is neither food nor lodging for one-half their number!

We are greatly mistaken if such a plan as we have pointed out, would not speedily be followed by admirable shows, a most decidedly beneficial influence, (at first on the agriculture of that portion of the State nearest the point fixed upon, and gradually on the whole State,) and a large and increasing usefulness and popularity of the State Society itself. The Fair being held for 5 years in one place, its managers would soon become experienced, the competitors, breeders of stock, and growers of crops would learn what is the standard of value; what the criterion of excellence, and would direct their attention, year after year to the attainment of these results. Instead of a miscellaneous assemblage of products composed in a great part of *accidental excellencies*, we should see collections composed

wholly of articles of real merit—the product of the highest intelligence and skill of the agricultural body of the State—applied directly to the object in view.

We have doubtless said enough on this subject—more, we fear, than will be palatable to all our friends interested. But we have said no more than the duty, as an organ of strong public feeling on this subject, has made it necessary for us to say—and, while we give our heartiest commendation to the labors of the State Society in the late volume of its *Transactions*, we must again repeat that there are great and lamentable defects in its Annual Shows, which may be, and should, be speedily remedied.

DOMESTIC NOTICES.

Onondaga Pear on Quince Stock.—*A. J. Downing, Esq.—Dear Sir:* The Onondaga, or Swan's Orange Pear, has been very favorably noticed, both in the Horticulturist, and in Hovey's Magazine, at different times during the two last years; and in some instances it has received the unqualified appellation of "one of our *very best* pears," "the king of pears," &c. &c. But whether it will ultimately prove equal to all that has been said in its favor, or whether its good qualities, as a desert fruit, will come up to the standard which has been assigned it, remains yet to be seen. We may however, even now, I presume, accord to it the merit of being a new fruit of good quality, and consequently any information, either in relation to the quality of the fruit or the habits of the tree, its growth, culture, &c. can not fail of being interesting to the Pomologist. It it also important for the cultivator to know whether it will succeed upon the *quince*. Upon this latter point the following is the result of my own practice.

In the spring of 1847, I received from Ellwanger & Barry, of Rochester, N. Y., five small trees of this variety, of one year's growth from the graft, portions of which were used for scions. These scions were worked upon almost every variety of pear stocks, from small seedlings of less than half an inch in diameter to the leading shoots of strong, healthy trees from two to four inches in diameter. They were also grafted upon vigorous, healthy, bearing pear trees, originally grafted upon the quince, and were consequently "double worked" on the quince. Those upon the pear, in every instance, made, last season, and now continue to make, strong growth, with extremely healthy looking foliage; whilst those that were double worked upon the quince made very indifferent growth last season, with very little thus far this season, the foliage now having a pale, sickly appearance, and hardly to be recognized as the same variety with those growing upon the pear.

In the autumn of 1847, I also inoculated this variety, both upon the pear and quince. The difference of growth in this case is much more apparent than in the other. Whilst the inoculations on the pear have made a growth at the present time of 12 to 18 inches, looking extremely healthy and vigorous, those upon the quince have only made from ten to twelve inches, having a very weak and sickly appearance, with a large proportion of total failures. The *Buerré d'Anjou, Louise Bonne of Jersey, Glout Morceau, Duchesse d'Angoulême*, and other varieties, which were worked upon the quince at the same time, and in the adjoining rows on each side, have made a uniform growth of 24 to 30 inches, looking very strong and fine, with scarcely a single failure.

From my own limited experience, as above detailed, I should therefore apprehend that this pear will not succeed well upon the quince; or at least, but very indifferently; and cultivators, I think, would do well not to work it very extensively upon that stock.

The variety of quince used by me for stocks, is the Angers, [or apple quince, Ed.] which is undoubtedly the best for that purpose. Respectfully. *Henry H. Crapo. New-Bedford, June 15th*, 1848.

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Belle Magnifique Cherry.—We find on further trial that we have not done justice to this cherry in our work on Fruits. It has borne a good crop with us this season, and we find it one of the most valuable of all the acid cherries. It is in flavor much milder or less acid than the common Kentish (pie cherry) or Morellos—double the size of the Kentish, of a handsome light red, bears good crops, and ripens among the late sorts—a week after the late Kentish. For cooking or preserving it is one of the very best sorts, and we are inclined to rank it before the Carnation or the Plumstone Morello—two of the most popular of the acid cherries.

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Cutting out fire blight.—We have been troubled in this neighborhood with that form of the pear tree blight termed by you "insect blight," and I wish to say to your readers that they cannot too highly rate the advantage of promptly cutting out every limb attacked, down to the fresh, sound wood, as soon as it appears. My own place is between that of two neighbors, both of whom are fruit-growers, and both having about an equal number of pear trees in orchard or garden cultivation. One of them takes little or no care of his trees;

the other gives them more or less attention daily. Now mark the difference: The careless cultivator came to me yesterday morning, saying that he began to believe that he should have to abandon the pear culture, as half his trees were dying or dead of the blight. On going into his garden, I found *twenty* trees very badly attacked, and some of them already quite dead. He had not taken the trouble to amputate a single limb. Afterwards I went into the garden of my neighbor on the other side, and on going over his place found his trees all healthy, and not one dead. He told me that his trees had been even more badly attacked than ——'s, (my first neighbor,) for he had taken some pains to examine the progress of the disease in the neighboring garden; but that he had spent *ten minutes per day*, for the past month, the first thing in the morning, in cutting out every bit of blight as soon as it made its appearance. The consequence was, that the blight had ceased in his trees, while it was still in full play in our neighbor's; and he had not lost a single tree, or even any considerable portion of a tree, while our neighbor had lost several outright. "Cutting and burning immediately," he therefore recommends as the only remedy yet known to him for the insect blight. Yours. *North River, July*, 1848.

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Garden Culture of Indian Corn.—Those of your readers who cultivate their vegetables in a contracted space, or in worn-out soil, will be glad to know, (if not already aware of it,) that guano acts most speedily and beautifully on the growth of this plant, applied in any stage of its growth, from the time it has two leaves till it is in full tassel.

I have a square of sweet corn, planted for the table, this year, on which I have tested it fairly. The ground was in fine order at planting. When the corn was 2 feet high, I applied, to one-half the patch, guano, at the rate of two table-spoonsfull to each hill. When the corn began to "top out," I repeated the dose, in both cases applying it after stirring the soil, and just before a rain. The effect is very satisfactory: I have not only gained in the size and quality of the ears on the part treated with guano, but I think after counting the rows, and comparing them, that I have also a third more ears in number, on all those plants on which the guano was used. These plants have alone attained to a size nearly half as large again as the others, with remarkably dark-green foliage. Yours. S. *Baltimore, July* 14, 1848.

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Fruit Culture at the South—*A. J. Downing, Esq.—Dear Sir:* I have had the pleasure of eating some peaches from the trees I got from the North and planted in February, 1847. The Early Tillotson began to ripen (was ripe) on the 10th day of this month, and from the few specimens on the trees this season, I think they will be as good as could be desired.

My Early Yorks are also ripe, and are splendid. I have from 600 to 700 peach trees planted in February, 1847, and I do not think finer trees can be found in any part of the world. I have them on a very level piece of land, and in handsome rows, and they are at this time a beautiful sight to look at. My apple trees are also doing very well indeed. They were planted at the same time the peach trees were, and quite a number of them have from one to a dozen apples on them: fully two-thirds of the Early Harvest trees have fruit, which promises to be very fine. This is a variety that I am decidedly pleased with; it seems to be the very thing for this climate; every tree is just as strong and healthy as I could wish. The Baldwin, Yellow Bellefleur, Maiden's Blush, Dutch Mignonne, and Beauty of Kent, look very healthy, and I think will do well; the Fall Pippin, also.

My pear trees are doing pretty well. Those on quince stocks are doing very well, with the exception of the Paquency and Beurre d'Aumalis Panache: they will not thrive with me on quince stocks. The Glout Morceau seems to grow very reluctantly on quince roots. All the rest of my varieties appear to be pretty much at home on the quince. The Colmar d'Aremberg, however must take the palm thus far; it does very well indeed. I have two specimens of the fruit of this variety, on trees planted in February last, and they are splendid; I think they would at this time weigh about ¾ lb. each, and will no doubt be much larger when ripe.

I observe that my pears on quince have a great propensity to send out shoots from near the ground, and I have so far let them remain. Is this right, or not? Your friend. *R. H., Mobile, Ala., June* 20, 1848.

P. S. The *Black Prince* proves with me a first-rate strawberry, in all respects.

[All shoots *below the graft* should be taken off.—Ed.]

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German Greens or Siberian Kale.—We have received from Messrs. Thorburn & Co, Seedsmen, New-York, a package of seeds of this vegetable, which we shall test in our garden. The following memorandum of culture and use accompanied the package:—

"Sow broad-cast in August, in a light, rich, and rather moist soil, and protect slightly in winter like spinach. It is fit for use and should be cut early in the spring. It grows about the size of a large cabbage-lettuce, is of a purple color, and equal in tenderness and quality to *Brussells Sprouts*."

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Horticulture in Carolina. * * * I have a vineyard of several acres attended by two French vignerons, but have not yet made wine. I hope, however, the rot will allow, to give wine making a trial the coming season. Foreign grapes, of which I have some twenty-five or thirty varieties, have entirely failed in open culture with me, with the exception of one—a *Red Chasselas* which is trained against my piazza,, and is therefore sheltered against our heavy dews. It has borne the seasons without a sign of rot; next year I shall try the plan of one of your cheap vineries.

I do not mean to enter the list against Mr. Longworth on the Strawberry question; that would be a fearful undertaking. But I really doubt whether the pistillate plants, duly intermixed with staminate, can produce heavier crops than those which I cultivate, and which are all staminate, (the Carolina pine.) I have *a quarter of an acre*

planted, from which I gathered, last year, *fourteen and a-half bushels;* and this season, one not quite so favorable, twelve bushels of fine fruit; some of the berries measuring 4¾ inches in circumference.

I have many fine peaches, natives of this part of the country, as well as others of French and northern origin. But I think ours will bear comparison with any of the imported varieties. Some of our early varieties are now ripening. *A. D. C., Aiken, S. C., June* 10, 1848.

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Mr. Longworths' reply to Mr. Prince.—*Mr. Downing*—I have been absent from Cincinnati 4 months on account of ill health, and returned this morning. I discover by a letter from Mr. Prince, in this journal, that he deems he has a seedling staminate strawberry plant, perfect in both organs, and that the examination of his plants now in fruit would settle the question. We have for years, cultivated several staminate varieties, that some years bear a fair crop of fruit. The *Iowa* is of this character, and some have thought the blossom perfect in both organs. I have cultivated it for ten years, and its average has not been one sixth of a crop of perfect fruit. A horticulturist in this vicinity (Mr. Schneicke) has raised a staminate plant, which he deems will entitle him to the premium I offered. It is under trial. He agrees with me in opinion, that *no correct opinion can be formed of its bearing character, in less than three years.*

From seed, not only staminate and pistillate plants are produced, but occasionally a chance plant, bearing both staminate and pistillate blossoms. A very large portion of the staminates never bear a single fruit, a portion of them occasionally bear a fair crop of fruit, and among these the *Boston Pine* and *Buist's Seedling* stand high. Yet after two years' careful cultivation by Mr. Ernst, they did not bear one-sixth of a crop of perfect fruit. The *Duke of Kent* and *Eberlin's Seedling*, bear both staminate and pistillate blossoms, and often bear a fair crop of fruit, and are well worthy of cultivation. But I do not believe that any staminate will average one-quarter as much perfect fruit as Hovey's Seedling. I will write again when in better health, between this and the next spring.—Yours, respectfully, *N. Longworth. Cincinnati, June* 10, [*not received till July* 10. Ed.]

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Pomological queries.—Mr. Downing--What pear that is a longer keeper than the Beurré d'Aremberg, would you recommend as best for orchard cultivation? (*a.*)

Is the Angers quince spoken of by Rivers in the May No. of the Horticulturist, (copied from the Eng. Gard. Mag.) the same as the Portugal quince recommended as the best stock for the pear, by S. G. Perkins and others; and is the latter the one commonly known in most nurseries in this country as the Portugal quince? (*b.*)

The cracking of the bark and exudation of gum on the finer varieties of cherries has been the subject of much remark among western fruit growers; and it has become a matter of great interest to know its "causes, treatment and cure," and especially what varieties are least and what most subject to it. Can you or some of your western correspondents, (Prof. Kirtland?) throw light upon the subject, and give lists as above suggested?

[Will Dr. Kirtland give his opinion? Ed.]

Have you yet thoroughly tested River's Early Amber Cherry? If so, please give its time of ripening compared with Elton and Knight's Early Black. Its size, productiveness, health of tree and general qualities for marketing, compared with the latter? (*c.*)

An answer in the Horticulturist to the above queries would oblige yours truly, *F. J. Scott. Toledo, O., July,* 1848.

Answers.—(*a.*) If you wish to plant for *market*, the variety that will give you the greatest profit, is the *Black Pear of Worcester.* It keeps well, and bears very large crops, and though only a cooking pear brings large returns. Prince's St. Germain, is the best very *late* winter pear that we have seen.

(*b.*) The "Angers' quince spoken of by Mr. Rivers, is the variety known as the *Apple* or *Orange Quince* in this country. We think Mr. Rivers is right and Mr. Perkins wrong in this matter. The Apple Quince is decidedly the best for stocks for dwarf pears. The sort frequently sold as the Portugal quince in this country, is only the apple or pear quince. (The Apple quince is the sort called "Portugal" quince in Western N. Y., about Rochester, &c.) We have the true Portugal growing in our grounds, which is a very distinct sort—the leaves are much larger and broader than those of the other quinces.

(*c.*) We are not prepared to speak positively yet about this cherry—another season will probably enable us to do so. But we think it has been overrated—as it appears to ripen later than, and not to be superior to, *Bauman's May.*—Ed.

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Mass. Hort. Society.—The reports of the weekly exhibitions of this Society for the past month, have not been received. At the business meeting of the Society on the 15th July, the committee appointed to confer with the Pennsylvania Hort. Society and the American Institute, in relation to the proposed Pomological Convention at New-York, reported that such a Convention had been deemed desirable, and that if it meet the views of the Society, the Committee ask authority to unite with the representatives of the above named Associations, in fixing on an early day in October next, and in making such further arrangements as they may deem necessary; which was adopted.

NEW-HAVEN COUNTY HORTICULTURAL SOCIETY. This society holds an annual exhibition of fruits, flowers and vegetables, at New-Haven, on the 26th, 27th and 28th days of September next. The list of premiums is large, and calculated to bring out an extensive display. The Annual Fair of the Agricultural Society of the same county, is this year united with that of the Horticultural Society.

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ALBANY AND RENSSELAER HORT. SOCIETY.—We have received the Report of the July exhibition of this Society, which was held at the Courthouse in Troy, on the 12th, which we are compelled to omit for want of room. "The show," says the Secretary, "was in all respects, such as to satisfy the friends of the Society; and its officers are encouraged in their efforts by the spirit which is manifested, and the continued evidence of the growing taste among exhibitors in the various departments."

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BUGS ON VINES.—Having been much annoyed the present as well as the past seasons by the operation of the striped and other bugs upon squashes, cucumbers, melons, &c., I mention a fact that has come under my observation for the benefit of those who will take the trouble to make the experiment. About the hills containing the seeds, at the time of planting, were set 8 or 10 *onions*. These grew with the growth of the plants. The plants are now vigorous and fair, and have not been disturbed by any insect. This was the purpose for which the onions were set out, and the effect, the present season, has been as described. The onions are in condition to produce seed without prejudice to the other crop. Possibly the experiment may be worthy the attention of those who would avoid the trouble of planting their seeds several times over. *H. Danvers, July* 1, 1848. (Boston Cultivator.)

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THE STRAWBERRY QUESTION AGAIN.—In the July No. of your interesting periodical, pages 19 and 49, I find communications from your correspondents, "SENEX," and Mr. G. W. HUNTSMAN, on the "still vexed" strawberry question. Both gentlemen have done me the honor to notice my "Remarks on Strawberries," page 493, in the May No. of your last volume. *Senex* is sorry that his remarks on the question, "*Is fertilization necessary?*" page 172, in October No., "have been misunderstood," and Mr. Huntsman has charged me with an "*attempt*" to set the strawberry question "at rest," to which charge I demur. I very much regret having misunderstood "*Senex.*" In his article above mentioned, as to the necessity of fertilization, he asserted it to be "*sheer nonsense*" to say that either species or varieties of *Fragaria* were in any sense dicœcious, and that in the order *Rosaceæ*, "there is not a dicœcious plant." I entertain a different opinion, believing in the dicœcious character of some species and many varieties of the strawberry; and also, that there is a dicœcious plant in the order Rosaceæ, the very *Cliffortia* singled out by Senex. That I *may* be mistaken, "is conceding no more than is incident to the fallibility of all human speculations." The strawberry in its dicœcious character may be "*anomalous*," as Mr. HUNTSMAN terms it, and the discussion of the question has certainly become so. Confusion has got to be confounded, and may be worse ere a proper understanding is had upon the subject.

Dr. LINDLEY'S authority is good; but I do not think it better than that of other botanists. His writings abundantly prove him to be as theoretical as the most ardent enthusiast could desire. I am aware that he does not use the word *dicœcious* when speaking of the old Hautbois strawberry: but what of that? By GEORGE DON, no mean authority, some varieties of the strawberry are said to be *always* dicœcious: why? Because of imperfect development of the inflorescence. I believe in the term as applied to Fragaria just so far and no farther. I regard the old Hautbois strawberry as dicœcious, "in a strict sence," because the male flowers are borne on one root, the female on another; yet I contend not that it is rigidly so, as Senex desires me to undertand *his* definitions for the rudiments of stamens or pistils are always present in every flower.

SENEX has stated unequivocally, "that there is not a dicœcious plant in the order *Rosaceæ*." In "*Paxton's Botanical Dictionary*," *Cliffortia* is placed in that order, and Dr. Lindley *assisted* in preparing the work for the press. In the "*Nomenclator Botanicus*," *of Steudel*, Cliffortia is thus referred to; 2d ed., p. 385: *Cliffortia*, Lin. Spr. 1977. Dec. II. 595. "Morilandia Neck. Fam. Dryadeæ. *Spach.*—Fructifloræ, *Royle.*—Passerineæ, *Rul.*—Rosaceæ, *Adanson*, *Jussieu.*—Sanguisorbeæ, *Sprengel.*—Rosaceæ, Cliffortieæ, Reichenbach, Tricoccæ, Lin." Dr. Lindley has but copied Sprengel if *he* has recently placed Cliffortiain *Sanguisorbeæ*, and this latter order only differs from Rosaceæ in the apetalous flowers, and definite stamens, alternating with the segments of the calyx. In the genera Sanguisorba, the flowers are hermaphrodite; in Poterium, they are polygamous, and in Cliffortia, dicœcious. Besides, in Sanguisorbeæ, the flowers are usually *unisexual* from abortion.

But *Senex* may desire me to be more specific and to name one or two *dicœcious* plants in the order Rosaceæ. I do so with pleasure, and point out to him the *Rubus australis*, and *Rubus chamæmorus*, the first a native of New-Zealand, the second of Europe, Siberia, and North America. The R. chamæmorus, (the mountain bramble,) is a valuable plant for crossing with the raspberry. The fruit is large, of a dull orange color, acid, mucilaginous, and agreeable to the taste.

In my "Remarks on Strawberries," in your May No., I had no thought of setting the (strawberry) "question at rest," though Mr. HUNTSMAN has said that I made the attempt to do so. Like himself, I claim to express opinions, and to state facts when I know them to be facts. This question of the dicœcious character of the strawberry, has been prolific in bringing out opinions, facts, and conclusions, and withal a few *contradictions;* mistakes, as they may be termed. The four "propositions" of Mr. HUNTSMAN, "being universally true," does not make it a "mistake" to say that the dicœcious character of the strawberry is the result of acci-

dent. If it be by the operation of a "*fixed law*," that the plants are diœcious, there is no need of further discussion or dispute: the question *is* "at rest."

You have termed Mr. HUNTSMAN "a careful observer," and I agree with you, but he can make *mistakes*, with all his care. He may even *contradict* himself, and I trust he will pardon me for pointing out wherein he has done so. In Hovey's Magazine for February, 1844, page 53, Mr. HUNTSMAN thus expressed himself: "That there are some varieties of *pistillate* plants that will bear fruit without being in the neighborhood of *staminate* plants, is, I think, well authenticated: among which may be reckoned the Hudson's Bay, your (Hovey's) Seedling, and others." When Mr. HUNTSMAN wrote the above, he had been a "close observer for some time, of the habits and nature of the plant."

In July 1846, Mr. HUNTSMAN wrote another paper, inserted in your August No. for that year, and gave the results of his "*experiments*" with Hovey's Seedling. "These experiments," says he, "prove to my mind very conclusively, that Hovey's Seedling will not bear any fruit unless impregnated with some staminate variety. And the same may be said of other varieties in which the stamens are *obsolete*." Mr. HUNTSMAN had cultivated the "Hudson Bay for three years," yet not a berry did the plants bear, because they were "in a position" precluding impregnation. He confesses himself, therefore, forced to believe that *pistillate* plants, both wild and cultivated, are absolutely devoid of pollen, and cannot, therefore, produce any fruit except when impregnated by others." It was "*well authenticated*" in 1844, that some varieties of *pistillate* plants, such as Hudson's Bay, Hovey's Seedling, and others, *would bear fruit without impregnation*. It was proved "*conclusively*," in 1846, that neither the Hudson's Bay or Hovey's Seedling *would bear a single berry unless impregnated*, yet both these statements are made by a close and careful observer, one who has studied the "habits and nature of the (strawberry) plant," and "cultivates from two to three acres of the most approved kinds." "Horticulture (says Mr. DOWNING,) is not yet a *perfected*, but a *progressive* science; and we (Mr. D.) are in favor of progress." In other words, facts may contradict themselves according to circumstances. Hovey's Seedling "*was* a *perfect* sort in its flower:" What is it *now?* Pistillate, by very general assent. It has, therefore, *changed* its character. Were the changes said to have taken place in the *original* plants? They were. The only increase had heen *by runners*. Therefore, by *this* testimony, normal or perfect blossoms can and do *change*. "Hovey's Seedling *was* an *imperfect* flowering variety, is so, and will ever remain so;" so says HOVEY himself. And Mr. HUNTSMAN's second fact or law is, that *hermaphrodite* and *pistillate* plants, "being increased by runners, *do not* vary their characters." I italicise the words do not.

This "strawberry question" has indeed assumed a Protean shape. How shall it be made plain enough for every man's comprehension? Is it a *fact* that Hovey's Seedling is both staminate and pistillate, according to cultivation? Is it a *fact* that the original Seedling was perfect? Is it a *fact* that being originally *pistillate only*, it must ever remain so? Is there any necessity for sexual distinction in the cultivation of the strawberry? Is impregnation at all necessary? Can fruitfulness be insured by any *other* means? Are soil and manure all sufficient to make strawberry plants *fruitful*, be they hermaphrodite, staminate, or pistillate? Are staminate plants generally worthless? Are all or any of the so fulsomely praised (*by the raisers*) *new* varieties better or as good as the few sorts already of established reputation? I "pause for a reply." Respectfully, &c., *W. W. Valk, M. D. Flushing, L. I., July*, 1848.

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NEW-YORK STRAWBERRY MARKET.—A few particulars, only a slight portion, doubtless, of strawberry statistics, show that even from this comparatively small fruit much profit must often result. Thus, we find it stated, that in twenty-six days 4572 bushels were sold in New-York; 514 bushels in a single day. Over 80,000 baskets, equal to 833 bushels, and weighing, probably, twenty-five tons, were brought to that city in one day by the Erie railroad alone. The whole number of baskets sent to New-York by this road, in the course of the season, is 602,640; being an increase over the previous season of 212,640, or 24 per cent. The average value is about 3 cents per basket, the quantity 6247 bushels, and the weight 260 tons; so that the persons residing along the road are supposed to have received $20,000 for strawberries in the last season. *Patent Office Report.*

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ANSWERS TO CORRESPONDENTS.

STRAWBERRIES.—*F. W.*, (Newark.) *Bishop's Orange* is a *pistillate* strawberry, and will not, therefore, bear well unless some *staminate* sort, such as Early Scarlet, is growing near it. If your bed of this sort which "grow luxuriantly and is literally covered with blossoms every spring, but bears no fruit," is an old bed, you had better make a new plantation from the runners, immediately, planting alongside a bed of some *staminate* sort; or if you prefer it, plant a strip of staminates at each end of the bed. If the bed is yet young, break up a small plot at each end of it (equal to one-fifth of the whole bed,) and plant it with Early Scarlet, Boston Pine, or any other good staminate variety, to fertilize the others.

C. B., (New Haven.) The *Black Prince* is one of the finest flavored of all large strawberries. There is scarcely any superior to it. *Wiley* is a *great* bearer, and gives great crops with trifling care, but the flavor is only second-rate. If you allow strawberry plants to run together in a mass, they will soon exhaust the soil and "run out," so as to bear very little. Beds grown in this way, should be broken up and re-planted every two years.

PEACH TREES.—*M. W. Phillips*, (*Miss.*) The rotting of the peaches in your young orchards, before maturity, we are inclined to attribute to their grossness and over-luxuriance. Apply shell lime, this autumn, as a top-dressing, in the two orchards affected, at the rate of 40 bushels to the acre, and

seed the ground or leave it unemployed for a couple of years. *R. P.*, (Philadelphia.) A bud from a tree diseased by the yellows, inserted in a perfectly healthy tree, will destroy the latter. We have proved this lately. *W. Thomas.* The three best peaches for your purpose are the following: True *Early York, George IV., Brevoort. J. J.*, (Charleston, S. S.) This year seedling peach stocks are fit for budding as soon as the time arrives, (August and September,) even if they are "not quite half an inch in diameter."

ANNUALS.—*A Tyro*, (New London.) Sprinkle the surface of the ground around your cypress vines and other climbing plants, which look feeble and yellow, with *guano*, then loosen and stir the surface with a hoe, and afterwards water every evening for a week. They will soon put on a dark-green colour and commence growing luxuriantly. *A Lady Reader.* (New London.) If you sow beds of Double Dwarf Lark-spurs about the middle of August, you will have a much finer bloom than it is possible to get by spring planting.

VEGETABLES.—*W. B.* (Albany.) The *Bassano* beet is altogether superior as a winter variety for the table to any other. This sort grows very rapidly, and will be in full time for winter use if sown now. The seed may be had at THORBURN'S, 15 John-street, New-York. Early Walcheren Brocoli has proved excellent with us, and appears to be hardier and easier of culture than the common sort. *O. Johnson*, (New-York.) We are cultivating the Ispahan (Persian) melon; so far, very successfully in the open air, and will give you the details at the end of the season. *W. C.*, (New-York.) If you give your cabbage ground a good top-dressing of *salt* (say at the rate of 12 bushels to the acre) next spring, before you break it up, you will not be troubled again with the "cut-worm."

APRICOTS.—*A Jerseyman.* The large Early Apricot proves very beautiful, very early and excellent with us. It ripens long before the Moorpark. (See account in previous page.) *Dubois' Early Golden* we have seen in abundance this season, and think even more highly of it than we did last year. It is one of the hardiest and most profitable sorts for market; and though not large, is handsome, and the flavor very good.

ROSES.—*A New Subscriber.* Bourbon roses may be budded on the stems of your prairies at any height you please, and it may be performed at once if the bark will peel readily. Mr. RIVERS is perhaps the largest rose grower in the world, and we have found him accurate in his sorts. Mr. JAMES WILSON of Albany, or probably BUIST of Philadelphia, or BALL of New-York, can supply the articles you mention.

GRAPES—The shrivelling of your grapes we should ascribe to the great heat of the sun, in the morning, before you admit air to the vinery. You should avoid such inequalities of temperature. The inside border, also, should be kept regularly and thoroughly moistened *throughout*. *An Old Gardener.* We will be much obliged to you, or any other of our subscribers, for a sight of any distinct varieties of the Isabella with fruit of superior quality or extra size.

PEARS.—*Querist*, (Baltimore.) The Seckel Pear will bear more manure than any other variety, and demands more to give large and handsome fruit. Vicar of Winkfield is a great and regular bearer, and brings a good price in market, and on the whole may be considered one of the most profitable sorts that can be planted for profit, though only of second quality. *X. Y. Z.*, (Rochester.) We think very highly indeed of Van Mon's Leon le Clerc. Specimens ripened here have been universally large, fair, beautiful and delicious, and neither here nor with you will it be the least affected by "cracking." The tree is thrifty and bears young.

TREES.—*W.*, (Cincinnati.) The Deodar Cedar is hardier and more rapid in its growth than the cedar of Lebanon. The latter probably suffers while young from the heat of the sun with you. Put up a trellis to shade it except from the morning and evening sun.

GRAPES.—*A. J. R.*, (New Bedford.) Allowing your grape vines to "trail on the surface of gravelly knolls," would not answer unless the surface is all gravel or rock, for the fruit would be spoiled, and it would be difficult to keep the vines properly pruned to ensure good crops and fruit. You had better train them on upright trellises, or even small poles. It would answer a very good purpose, however, and the grapes would ripen better, if a horizontal trellis or frame were made parallel to the surface, and only 2 or 3 feet above it, upon which to train the vines. The very complete exposure of the foliage by this mode, would improve the quality of the grapes; but it would be a less easy way of cultivating grapes in any quantity, than when the upright trellis is used.

IMPROVEMENT OF FRUITS.—*H.* (Columbus, O.) The common blackberry *is* capable of improvement. Select the very largest and finest fruit you can find, and plant them immediately in a rather shaded situation. They will vegetate in the spring, and bear, probably, in the succeeding year. Then select, again, the very largest fruit from these seedlings, and sow the seeds of those. In this way you will no doubt be able to double the size and greatly improve the flavor of this fruit, in two or three generations.

POMOLOGICAL CONVENTION.—*E.* (Cincinnati.) The Pomological Convention will meet in New-York the first week in October, and as we learn that it is to be composed entirely of *delegations* from all the leading Horticultural Societies of the country—delegations, we presume, of experienced pomologists and fruit-growers—we look forward to it as a very important meeting. We have not yet received the circular, but will publish it next month. The pomological meeting at Buffalo will also, no doubt, be very interesting.

*** Correspondents who are *subscribers*, will hereafter find replies to any question on subjects within the scope of this journal, in this department, (unless otherwise requested)—and all queries put in a *brief shape*, and sent to us *free of postage*, shall receive attention.—ED.

PENNSYLVANIA HORTICULTURAL SOCIETY.

The stated meeting for July was held on the evening of the 18th The president in the chair.

The display of fruits was excellent. The grapes were particularly fine, and consisted of large bunches of Black Hamburg and Victoria, White Frontignac and Palestine—varieties from the forcing houses of the president; and White Frontignac and White Chasselas, from the collection at the convent of the Sisters at Andalusia. Of apricots, a number of dishes; one of unusually large size, raised by John White, Burlington, N. J, on a tree growing in an eight feet wide alley, where it receives only three hours sun daily, in common soil, unmanured; it, however, has been watered after sunset with a small quantity of soap-suds. Plums, the Miser, a seedling, and other varieties; and three or four varieties of apples, and several of pears. Also peaches, and Fairchild's nectarines, from the green-house of Mr. Cope A dish of cultivated blackberries,—a specimen of the first crop of a field of one-fourth of an acre. Of plants, there were interesting collections, and handsome bouquets; and a very fine show of vegetables.

Reports of the Standing Committees.

The Committee on Plants and Flowers feel much pleasure in awarding the following premiums:

CACTI.—For the best six plants in pots, to B Daniels, gardener to C. Cope.

LILIUM LANCEOLATUM.—For the best two in pots, to John Sherwood.

HOT-HOUSE PLANTS.—For the best three in pots, to Ben Daniels; for the second best do., to the same.

PLANTS IN POTS.—For the best collection, to James Bisset, gardener to James Dundas; for the second best do., to Robert Buist; for the third best do., to Ben Daniels. For the best bouquet, for the second best do., for the best bouquet formed of indigenous flowers and for the best basket formed of indigenous flowers, to Robert Kilvington. For the best basket of cut flowers, to James Bisset; and for the second best do., to Ben. Daniels.

The Committee on Fruits, report that they have awarded the following premiums, viz:

GRAPES.—Best three bunches of a black variety, Hamburg, to B. Daniels, gardener to C Cope; for the second best do., Victoria, to the same. For the best of a white variety—White Frontignac, and the second best do.—Chasselas, to Wm Westcott.

APRICOTS.—For the best Moorpark, to John White; for the second best do.—Moorpark, to John Anspach, jr.

PLUMS.—For the best, (a seedling,) to Alexander Parker; for the second best do., to W. Foster, Burlington.

APPLES.—For the best, the Yellow Harvest, to John Perkins; for the second best do., Bough, to G. B Deacon, Burlington. And your committee cannot pass without notice several varieties of pears, but with one exception unripe, and the quality therefore not ascertainable. Some fine peaches, also, were exhibited, of artificial culture. And your committee noticed a dish of very fine blackberries, of domestic culture, and the first fruits of one-fourth of an acre. The Fairfield Nectarines, and some other fruits, were exhibited, but in an immature state.

The committee also respectfully report that they have awarded a premium of ten dollars for the best seedling strawberry, offered to their notice this year, to Gerhard Schmitz, for a variety raised by him, and named by the committee the Moyamensing.

The Committee on Fruits reported that they were unable to aid, or practically to devise, a plan to obtain the requisite information on the subject of the amount of small fruits sold in the markets, referred to them at the last meeting.

The Committee on Vegetables report that they have awarded the following, viz:

For the best display by market gardeners, and for the second best do., to Anthony Felten. For the best display by amateurs, to Isaac B. Baxter; for the next best do., to B. Daniels, gardener to C. Cope.

OBJECTS EXHIBITED.—Plants by B. Daniels, gardener to C. Cope. Cacti, hot-house plants, green-house plants, &c.

By Robert Buist, several species of achimenes, phloxes, Fuchsias, liliums, etc.

By James Bisset, gardener to J. Dundas, a good collection.

By John Sherwood, specimens of lilium lanceolatum.

BOUQUETS.—By R. Kilvington, James Bisset, Ben. Daniels and others.

FRUITS.—By B. Daniels, gardener to C. Cope, grapes, Black Hamburg, White Frontignac, Victoria and Palestine; peaches and Fairchild's Nectarines.

By W Westcott, gardener to Institution of the Sisters of the Sacred Heart, White Frontignac, and White Chasselas Grapes.

By John White, Burlington, Moorpark Apricots.

By John Anspach, jr., Sp. Garden, Moorpark Apricots.

By Alex. Parker, apricots and plums, seedlings.

By W. Foster, Burlington, the Miser Plum.

By John Perkins, Moorestown, N. J., apples, Yellow Harvest, Striped Harvest, and White Juneating.

By Geo. B Deacon, Burlington, Bough Apple.

By Thos. Hancock, Burlington, Red Astrachan Apple.

By Dr. D. James, Byberry, Yellow Harvest Apple.

By John Sherwood, a number of kinds of pears.

By Isaac B Baxter, pears and plums.

By Benjamin Parker, near Germantown, cultivated blackberries

VEGETABLES.—By A. Felten, an extensive collection.

By Isaac B. Baxter, a fine collection.

By Ben. Daniels, gardener to C. Cope, some choice specimens.

Reports of Standing Committees at the Intermediate Meeting, held July 3d.

The Committee on Plants and Flowers award the premiums—for the best six carnations, for the second best six do., and for the best American seedling carnation, to Matthew Mills.

The Committee on Fruit award the following premiums, in accordance with the schedule:

For currants—for the best Red, White and Black, to Sam'l Cooper.

For gooseberries—for the best quart, Smith's White, to Isaac B. Baxter.

Raspberries—for the best one quart, Antwerp, to Samuel Cooper; for the second best, native, to Isaac B Baxter.

The committee recommend—for a fine dish of Yellow Harvest Apples, by John Perkins; also for Muscat Robin Pears, by Isaac B Baxter—a special premium of one dollar to each.

They were highly gratified by the exhibition of a seedling cherry, by James Gillin, with red flesh, combining the flavor of the Mayduke and Morello, resembling the first named variety in shape and colour, but scarcely equal to it in size.

They also noticed a Morello of remarkable size, called the English, shown by John Perkins; and peaches from the forcing-house of the president, attracted much attention.

The following seedling raspberries, from Dr. Brinckle, elicited great admiration, viz: the Cushing, the Orange, the Col. Wilder, No 19 F. and No. 19 M.; and the committee believe that some, at least, of these varieties, when in general cultivation, will prove most valuable additions to our list of dessert fruits

The Committee on Vegetables award the premiums for Tomatoes—for the best, a half a peck, to Samuel Cooper; for the second best do., to Benj. Gulliss.

OBJECTS SHOWN.—Carnations, by Math. Mills, Frankford.

FRUIT.—By Sam'l Cooper, Red, Black and White Currants, Smith's White and Rough Red Gooseberries, and Antwerp Raspberries

By Isaac B. Baxter, pears, Muscat Robin; Whitesmith, and long green gooseberries, and native raspberries.

By John Perkins, Yellow Harvest Apples, and English Morello Cherries.

By Anthony Felten, Red and Black Currants, and Antwerp Gooseberries.

By James Gillin, seedling cherries.

By C. Cope, peaches.

By Dr. W. D. Brinckle, seedling raspberries.

VEGETABLES.—Tomatoes, by Sam'l Cooper, B. Gulliss and W. Johns. Also a specimen of Hutchinson Wheat, by John R. Brinckle. Adjourned.

THO. P. JAMES,
Recording Sec'y.